

Ministry of Health

Health Care Provider Qs & As: Information for Individuals ≥ 65 years of age

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

1. What publicly funded influenza vaccines are available for individuals ≥ 65 years of age for Ontario's 2021/2022 Universal Influenza Immunization Program (UIIP)?

The publicly funded influenza vaccines available for individuals 65 years of age and older include:

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

	1. Quadrivalent Inactivated Vaccine			
UIIP Abbreviation	QIV			
NACI Abbreviation	IIV4-SD			IIV4-cc
Vaccine product	FluLaval Tetra	Fluzone® Quadrivalent	Afluria® Tetra	Flucelvax® Quad
Age indication	≥ 6 months	≥ 6 months	≥ 5 years	≥ 2 years
Manufacturer	GSK	Sanofi Pasteur	Seqirus	Seqirus
Vaccine type	Egg-based	Egg-based	Egg-based	Cell culture-based
Micrograms of hemagglutinin	15 μ g	15 μ g	15 μ g	15 μ g
Dosage	0.5 mL	0.5 mL	0.5 mL	0.5 mL
Format	MDV	1. MDV 2. PFS	1. MDV 2. PFS	PFS

Vaccine product	FluLaval Tetra	Fluzone® Quadrivalent	Afluria® Tetra	Flucelvax® Quad
Route	IM	IM	IM	IM
Most common allergens¹	<ul style="list-style-type: none"> • Egg protein² • Thimerosal 	<ul style="list-style-type: none"> • Egg protein² • Thimerosal³ 	<ul style="list-style-type: none"> • Egg protein² • Neomycin • Polymyxin B • Thimerosal³ 	Does NOT contain egg protein or thimerosal

	2. High-Dose Quadrivalent Inactivated Vaccine	3. 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
Most common allergens¹	<ul style="list-style-type: none"> • Egg protein² 	<ul style="list-style-type: none"> • Egg protein² • Kanamycin • Neomycin

MDV = Multi-dose vial PFS = Pre-filled syringe IM = Intramuscular injection

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

² The 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.

³ Multi-dose vial format only

Important notes:

- Fluzone® Quadrivalent and Fluzone® High-Dose Quadrivalent are different products. Please use caution when administering Fluzone® products to ensure that the right vaccine is being administered to the right person.
- Fluzone® High-Dose Quadrivalent and Flud® are available through primary care providers (e.g. physicians and nurse practitioners), participating pharmacies and retirement homes, long-term care homes and hospitals.

2. What is QIV-HD and how is it different than the QIV?

The QIV-HD and QIV both contain four influenza strains (A(H3N2), A(H1N1) and two B strains), however, QIV-HD contains a higher amount of antigen per strain than standard-dose influenza vaccine formulations. The QIV-HD contains 60 µg of hemagglutinin (HA) protein for each of the four vaccine strains, compared to 15 µg of HA per strain in a standard dose QIV.

Studies have shown that the higher antigen content in the high-dose vaccine improves the immune response and prevention of influenza hospitalizations compared to standard dose vaccine, which is important since older individuals may not respond as well to influenza vaccines compared to younger individuals.

3. What is Flud® (TIV-adj)?

Flud® is an adjuvanted inactivated influenza vaccine that is targeted to persons 65 years of age and over. The adjuvant is designed to improve the immune response to the vaccine, which is important since older individuals may not respond as well to influenza vaccine as younger individuals. The adjuvanted vaccine is a trivalent vaccine, meaning it is designed to protect against three influenza viruses, two influenza A viruses and one influenza B virus.

4. What is an adjuvant?

An adjuvant is a substance added to a vaccine that helps the recipient develop an improved immune response compared to receiving an unadjuvanted vaccine. The adjuvant in Flud® is an oil-in-water mixture called MF59.

5. What is the difference between cell culture-based and egg-based influenza vaccines?

	Cell culture-based vaccines	Egg-based vaccines
Vaccines	Flucelvax® Quad	FluLaval Tetra, Fluzone® Quadrivalent, Fluzone® High-Dose Quadrivalent, Afluria® Tetra, Fluad®
How the vaccine is made	Produced by growing influenza viruses in cultured cells of mammalian origin.	Produced by growing influenza viruses in hens' eggs.
Protection	Both egg-based and cell culture-based QIVs provide protection against four strains of influenza and are available in the UIIP for 2021/2022. Egg-based adjuvanted TIV provides protection against three strains of influenza and is available in the UIIP for 2021/2022 for those 65 years and older. Any of the available products can be used in the age group for which they are indicated.	

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

Do not delay vaccination to wait for a particular product. The QIV, QIV-HD and TIV-adj all protect against the flu, and the most important thing is for older adults to be vaccinated.

For individual-level decision making, NACI in Canada states that when available, high-dose should be used over standard-dose inactivated influenza vaccine, given the burden of influenza A(H3N2) disease and the good evidence of better protection compared to standard-dose in adults 65 years of age and older.

However, NACI states that any of the available age appropriate influenza vaccines should be used. There is no preferential recommendation for the use of QIV-HD versus TIV-adj vaccine for this age group.

To date, no studies have directly compared QIV-HD and TIV-adj formulations or TIV-adj and QIV formulations.

The following information should be considered when discussing vaccine options:

- There is insufficient evidence to make a preferential recommendation between QIV-HD and TIV-adj. There is good evidence of QIV-HD providing better protection compared to QIV standard dose.

- In considering use of TIV-adj and QIV standard dose, given the increased burden of disease associated with influenza A(H3N2) in older adults, better protection against influenza A(H3N2) afforded by the TIV-adj may be more important, especially in those with multiple co-morbid conditions and compromised health status.

For more information on the vaccines available for individuals 65 years of age and older, please refer to the following:

- *Canadian Immunization Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2021-2022* available at: www.canada.ca/en/public-health/services/publications/vaccines-immunization/canadian-immunization-guide-statement-seasonal-influenza-vaccine-2021-2022.html and;
- Public Health Ontario's *Influenza Vaccines for the 2021-2022 Influenza Season* available at: www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/influenza.

7. How many doses of the influenza vaccine are needed to provide protection?

One dose of the influenza vaccine is needed to provide protection each year (each influenza season).

8. Who can administer the influenza vaccine?

Individuals who can administer the influenza vaccine include:

1. Regulated health professionals who are authorized under the *Regulated Health Professions Act, 1991* to administer vaccines.
 - Note: trained pharmacists may only administer publicly funded influenza vaccine to individuals 2 years of age and older.
2. Trained individuals under a delegation made in accordance with the requirements set by the regulatory College of the regulated health professional.

9. Can the vaccine cause influenza?

No, the standard dose QIV, QIV-HD and TIV-adj are all inactivated vaccines so individuals cannot get influenza from the vaccine.

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

The influenza vaccine will not protect against coronaviruses, including the coronavirus that causes COVID-19, but will help prevent influenza.

11. Will the influenza vaccine increase risk of illness with COVID-19?

Expert groups and evidence indicate that getting the influenza vaccine will not increase your risk of COVID-19 illness.

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

Vaccine	Intervals (if applicable)
COVID-19 and other vaccines	The influenza vaccines for 65+ (i.e., QIV-HD, TIV-adj, and QIV) may be given at the same with other vaccines, or at any time before or after, other vaccines, including COVID-19 vaccine. 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.
Shingrix®	Data supporting co-administration of Fluvad® (TIV-adj) and Shingrix® is not available. It is unknown how the two adjuvants may interact.

13. Can the vaccine be given to individuals when they are ill?

Those with a severe acute illness with or without fever should wait until the symptoms subside before being immunized.

Individuals with symptoms of acute respiratory infection, including minor symptoms such as sore throat, should be recommended to be tested for COVID-19 and complete the COVID-19 Self-Assessment Tool (available at: covid-19.ontario.ca/self-assessment). If the individual tests negative, and otherwise passes the Self-Assessment Tool, influenza immunization may be provided.

During the COVID-19 pandemic, individuals who are self-isolating (either as a suspected, probable or confirmed COVID-19, or due to exposures), should not attend influenza immunization appointments or clinics during their period of

isolation as they may pose an unnecessary risk to the public and health care providers.

14. What are the common side effects from the influenza vaccine?

The most common side effects from the influenza vaccine are:

- Redness, swelling, and soreness at the injection site
- Headache
- Tiredness/weakness
- Fever

These side effects are generally mild and last only a few days.

15. Who should NOT get the influenza vaccine?

Anyone who has had a serious allergic reaction (anaphylaxis) to a previous dose of influenza vaccine or to any ingredient in the vaccine, except for egg, should not be vaccinated. According to NACI, egg-allergic individuals may be vaccinated against influenza using the full dose of any age-appropriate product, including QIV, QIV-HD and TIV-adj.

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.

16. How long should the observation period be following influenza immunization?

NACI recommends that the 15-minute post-vaccination observation period, as specified in the Canadian Immunization Guide (available at: <https://www.canada.ca/en/public-health/services/canadian-immunization-guide.html>), should be maintained for influenza vaccination settings that can adhere to appropriate public health and infection prevention and control measures to reduce COVID-19 transmission, particularly physical distancing.

NACI recommends that a shorter post-vaccination observation period, between 5 to 15 minutes after influenza immunization, may be considered during the COVID-19 pandemic, but only during times when appropriate physical distancing in post-vaccination waiting areas cannot otherwise be maintained due to the volume of individuals seeking immunization, and only when the following specific conditions are met:

- Past history of receipt of influenza vaccine and no known history of severe allergic reactions (including anaphylaxis) to any component of the influenza vaccine being considered for administration.
- No history of other immediate post-vaccination reactions (e.g. syncope with or without seizure) after receipt of any vaccines.
- The vaccine recipient is accompanied by a parent/guardian (in case of a child) or responsible adult who will act as a chaperone to monitor the vaccine recipient for a minimum of 15 minutes post-vaccination. In the case of two responsible adults, both can be vaccine recipients for the purposes of this criterion, if both agree to monitor the other post-vaccination.
- The vaccine recipient will not be operating a motorized vehicle or self-propelled or motorized wheeled transportation or machinery for a minimum of 15 minutes after vaccination.
- The vaccine recipient and the parent/guardian or responsible adult chaperone are aware of when and how to seek post-vaccination advice and given instruction on what to do if assistance and medical services are required.
- The vaccine recipient and the parent/guardian/responsible adult agree to remain in the post-vaccination waiting area for the post-vaccination observation period and to notify staff if the recipient feels or looks at all unwell before leaving. They should be informed that an individual exhibiting any symptom suggestive of an evolving AEFI at the end of the shortened post-observation period necessitates a longer period of observation in the clinic.

17. What information should be provided to individuals related to potential adverse events following immunization (AEFI) with 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. Some studies have found a possible small association between injectable influenza vaccine and Guillain-Barré Syndrome (GBS) and others have not found any association. Oculorespiratory Syndrome (ORS) may occur in extremely rare instances. Please refer to question 21 of the Health Care Provider Q & A: Information for the 2021/2022 Influenza Season sheet for further details.

As per the s.38 of the *Health Protection and Promotion Act*, those administering vaccines should ensure that the vaccine recipients are aware of the need to report adverse events following immunization to their health care provider. Vaccine recipients should be advised to go to the nearest emergency department if severe reactions develop, including the following:

- Hives
- Swelling of the mouth or throat
- Trouble breathing, hoarseness or wheezing
- High fever (over 40°C or 104°F)
- Convulsions (seizures)
- Other serious reactions

Health care providers (e.g., physicians, nurses and pharmacists) are required by law (i.e., Health Protection and Promotion Act, s. 38) to report AEFIs to their local public health unit. 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.

18. Where can health care providers find more information about the UIIP?

Health care providers looking for more information about influenza, influenza vaccine, or the province's UIIP can refer to the Health Care Provider Qs & As: Information for the 2021/2022 Influenza Season sheet, Public Health Ontario (www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/influenza) or to their 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.

19. Who should individuals talk to if they have questions about influenza or any other vaccines?

Individuals looking for general information about influenza, the influenza vaccine or the province's UIIP can call ServiceOntario, INFOline at 1-866-532-3161 toll free in Ontario (TTY#1-800-387-5559) or visit: www.ontario.ca/flu. Questions about the vaccine that are specific to an individual's medical condition should be discussed with a health care provider or 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) Public Health Ontario: www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/influenza
- d) Immunize Canada: www.immunize.ca/
- e) Centers for Disease Control and Prevention (CDC) - Seasonal Influenza: www.cdc.gov/flu/
- f) List of public health unit locations: www.health.gov.on.ca/en/common/system/services/phu/locations.aspx

Version française disponible en communiquant avec le 1-866-532-3161 ATS: 1-800 387-5559 (site web: www.health.gov.on.ca/fr/pro/programs/publichealth/flu/)