Influenza Vaccine

High-Dose Quadrivalent Inactivated

Implementation: September 2023

Please consult the Product Monograph[1] for further information about the vaccine.	
	Fluzone® High-Dose Quadrivalent
Manufacturer	Sanofi Pasteur Inc.
Licensed use	65 years of age and older
Off-license use	None
Indications for use of provincially funded vaccine	Individuals aged 65 years and older who are living, working, or visiting Alberta. • The Alberta Influenza Immunization Program will begin on **October 16, 2023**, for the general public. • The Alberta Outreach Immunization Program will occur before the general public program begins (earlier in October) as soon as vaccine becomes available.
Influenza strains for 2023-2024 season	• an A/Victoria/4897/2022 (H1N1)pdm09-like virus; • an A/Darwin/9/2021 (H3N2)-like virus; and • a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and • a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.
Dose	0.7 mL[1,3]
Route	Intramuscular injection in the deltoid muscle
Schedule	**65 years of age and older** ❖ 1 dose **Note:** • CAR T-cell therapy recipients without a prior history of HSCT who received influenza vaccine pre-CAR T-cell therapy are eligible to restart their influenza vaccine series, beginning at least 3 months post-CAR T-cell therapy. Consultation with their physician is not necessary as long as a clearance letter has been received to proceed with inactivated vaccines. • For HSCT recipients whose post-HSCT vaccine series were interrupted by CAR T-cell therapy, see the following HSCT recommendations: ○ Principles of Immunization in Hematopoietic Stem Cell Transplant Recipients and Solid Organ Transplant Recipients ○ Child HSCT ○ Adult HSCT

Contraindications	• Known severe hypersensitivity to any component of the vaccine with the exception of egg[3] (see Precautions below). • Anaphylactic or other allergic reaction to a previous dose of influenza vaccine.[1,3] • Avoiding subsequent immunization of individuals known to have had Guillain-Barré Syndrome (GBS) within six weeks of a previous influenza immunization is prudent at this time.[1,3] However, the potential risk of GBS recurrence associated with influenza vaccine must be balanced against the risk of GBS associated with influenza infection itself and the other benefits of influenza immunization.[1,3] The relative and attributable risks of GBS after seasonal influenza immunization are lower than those after influenza illness.[4]
Precautions	• Egg-allergic individuals may be immunized against influenza using inactivated vaccine without a prior influenza vaccine skin test and with the full dose of vaccine, irrespective of a past severe reaction to egg.[3] Egg-allergic vaccine recipients should be kept under observation for 30 minutes following the administration of inactivated influenza vaccine. • Expert review of the risks and benefits of influenza immunization should be sought for individuals who previously experienced severe lower respiratory symptoms (wheeze, chest tightness, difficulty breathing) within 24 hours of influenza immunization, an apparent significant allergic reaction to the vaccine or any other symptoms (e.g., throat constriction or difficulty swallowing) that raise concern regarding the safety of re-immunization.[3] This advice may be obtained from the local Medical Officer of Health or other experts in infectious disease, allergy, immunology and/or public health or any combination of these specialties.[3] • Individuals who have experienced oculorespiratory syndrome (ORS) including those with a severe presentation (bilateral red eyes, cough, sore throat, hoarseness, facial swelling) but without lower respiratory tract symptoms, may be safely re-immunized.[3] Advice of an expert should be sought before immunizing individuals who experienced ORS with lower respiratory tract symptoms.[3] • Although influenza vaccine can inhibit the clearance of warfarin and theophylline, clinical studies have not shown any adverse effects attributable to these drugs in people receiving influenza vaccine.[3]
Possible reactions	• See Product Monograph
Pregnancy	• Not applicable
Lactation	• Not applicable

Program Notes	• 1992 (approx.) - Influenza vaccine split virus Influenza split virus vaccine first used in Canada in approximately 1992. (Fluviral® & Vaxigrip®) • 2009 -10 - Influenza vaccine for H1N1 Pandemic universal program for everyone six months of age and older. • 2009-10 - Influenza seasonal vaccine universal program to include all Albertans six months of age and older. • 2015-08-12 - Influenza Vaccines 2015-2016 season: Fluad® (all Albertans aged 65 years and older.), Flumist® Quadrivalent, Fluviral, Influvac® (This is the vaccine of choice for adults 18 to 64 years of age). • 2016-08-29 – Influenza vaccines 2016-2017 season: Fluzone®, Fluad®, Flumist® • 2017-07 - Influenza Vaccines 2017-2018 season: Fluzone®, Fluad®. • 2018-08 – Influenza Vaccines 2018-2019 season: Fluzone®, FluLaval® Tetra. • 2019 - Influenza Vaccines 2019-2020 season: Fluzone®, FluLaval® Tetra. • 2020 - Influenza Vaccines 2020-2021 season: Fluzone®, FluLaval® Tetra, Alfuria® Tetra, Fluzone HD (65 years of age and older who reside in long term care beds). • 2021 -Influenza Vaccines 2021-2022 season: Fluzone®, FluLaval® Tetra, Alfuria® Tetra, Fluzone® HD (65 years of age and older) • 2022 Influenza Vaccines 2022-2023 season: Fluzone®, FluLaval® Tetra, Fluzone® HD (65 years of age and older) • 2023 Influenza Vaccines 2023-2024 season: Fluzone®, FluLaval® Tetra, Fluzone® HD (65 years of age and older)

References

[1] Sanofi Pasteur Inc. (2023). Fluzone® High-Dose Quadrivalent Influenza Virus Vaccine - Types A and B (Split Virion). *Product Monograph*.

[2] World Health Organization. (2023). Recommended composition of influenza virus vaccines for use in the 2023-2024 northern hemisphere influenza season. Retrieved from: https://www.who.int/news/item/24-02-2023-recommendations-announced-for-influenza-vaccine-composition-for-the-2023-2024-northern-hemisphere-influenza-season

[3] National Advisory Committee on Immunization. (2023). Statement on seasonal influenza vaccine for 2023-2024. https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/national-advisory-committee-immunization-statement-seasonal-influenza-vaccine-2023-2024.html

[4] Kwong, J. C., Vasa, P. P., Campitelli, S. H., et al. (2013). Risk of Guillain-Barré syndrome after seasonal influenza vaccination and influenza health-care encounter: a self-controlled study. *Lancet Infectious Disease, 13, 769-76.*

