BC Centre for Disease Control
An agency of the Provincial Health Services Authority

Influenza vaccines for adults 65 years of age and older Question and Answer Document August 2022

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1. What vaccines are recommended and publicly funded in BC for adults 65 years of age and older?

Adults 65 years and older have an increased risk of severe influenza illness, hospitalization, and death compared with younger populations. (1, 2) Use of potentially more effective vaccines for older people can avert serious outcomes. In BC, enhanced influenza vaccines are recommended in the 2022/23 season for adults 65 years of age and older. These include FLUZONE® High-Dose (HD QIIV) and FLUAD® (adjuvanted TIIV).

FLUZONE® High-Dose Quadrivalent is publicly funded for adults 65 years of age and older who are residents of long-term care, assisted living or First Nations communities.

FLUAD® is publicly funded for adults 65 years of age and older residing in the community.

2. What are the differences between FLUAD® and FLUZONE® High-Dose Quadrivalent influenza vaccines?

These vaccines enhance the immune response to influenza antigens in older adults through two different means.

FLUZONE® High-Dose Quadrivalent contains a four-fold higher antigen content (hemagglutinin or HA) per dose than standard dose (SD) QIIV formulations.

FLUAD® has the same HA content per strain as standard formulation vaccine, but is adjuvanted with the MF59®, an oil-in-water squalene-containing emulsion approved for use in pandemic and seasonal influenza vaccines in many countries. This vaccine is only available in trivalent formulation with a single B strain (see Question 3).

Both FLUZONE® HIGH-DOSE QUADRIVALENT and FLUAD® are given by intramuscular (IM) injection.

	FLUAD®	FLUZONE® High-Dose Quadrivalent
Number of	3	4
strains covered	 For the 2022/23 season, these include: A/Victoria/2570/2019 (H1N1)pdm09-like virus A/Darwin/9/2021 (H3N2)-like virus B/Austria/1359417/2021-like virus 	 For the 2022/23 season, these include: A/Victoria/2570/2019 (H1N1)pdm09-like virus A/Darwin/9/2021 (H3N2)-like virus B/Austria/1359417/2021-like virus B/Phuket/3073/2013-like virus
Antigen content	15 μg HA (45 μg total) per 0.5 mL	60 μg HA (240 μg total) per 0.7 mL
for each strain	dose	dose
Adjuvant	MF59®	None

3. What is the impact of the additional B strain in FLUZONE® High-Dose Quadrivalent that is not included in FLUAD®, for adults 65 years of age and older?

There are two lineages of influenza B virus: Victoria and Yamagata. The quadrivalent vaccine includes both lineages. The trivalent vaccine includes only one or the other lineage. When the influenza B lineage chosen for the trivalent vaccine has differed from the circulating lineage, studies have shown the trivalent vaccine still provides some, albeit variable, cross-protection. Although experts continue to monitor, there has been scant detection of the Yamagata lineage globally since the start of the SARS-CoV-2 pandemic. Instead, most of the influenza B viruses circulating have been Victoria lineage. For the 2022-23 season, both the trivalent and quadrivalent influenza vaccines contain the same Victoria lineage. Absence of the Yamagata lineage from the trivalent vaccine is not expected to have much, if any, impact on vaccine protection compared to quadrivalent vaccine during the 2022-23 season.

4. Is one of these vaccines recommended above another for adults 65 years of age and older?

There is evidence from both randomized controlled trials and observational studies favouring the use of enhanced influenza vaccines including FLUZONE® High-Dose Quadrivalent and FLUAD® for adults 65 years of age and older when compared to standard-dose unadjuvanted influenza vaccines for prevention of influenza-related hospitalization. There is insufficient evidence to indicate superiority of any one of the enhanced influenza vaccines over another. (3) Any of the enhanced vaccines are recommended for this age group.

5. What is the safety profile for FLUZONE® High-Dose Quadrivalent and FLUAD®?

Both FLUAD® and FLUZONE® High-Dose Quadrivalent have been associated with higher rates of local (e.g., pain, erythema) and systemic (myalgia, malaise, headache) reactions in the 7 days following vaccine receipt relative to standard dose influenza vaccines. These reactions are typically mild to moderate in nature and of short duration, usually resolving within 3 days. Serious adverse events were reported infrequently and at similar rates as following standard formulation vaccines.

6. In the event that neither FLUZONE® High-Dose Quadrivalent nor FLUAD® is available, can standard dose be offered to adults 65 years of age and older?

It is expected that the FLUZONE® High-Dose Quadrivalent vaccine will be available in appropriate supply for the intended populations for receipt in long term care, assisted living and residents of First Nations communities. In the event that FLUAD® is not available locally such as could occur later in the season, FLUZONE® Quadrivalent will be available for use and should be offered instead of recommending that individuals wait for FLUAD® supply or travel to receive FLUAD®. Those 65 years of age and older who receive a standard formulation influenza vaccine within the season are not advised to receive a subsequent dose of enhanced influenza vaccine within the same season.

7. Where can I obtain more information about these vaccines?

The following sources of information are available online:

- NACI (National Advisory Committee on Immunization) Statement on <u>Seasonal Influenza</u> <u>Vaccine for 2022-2023</u>
- FLUZONE® High-Dose Quadrivalent <u>product monograph</u> and <u>Sanofi Pasteur information for the public</u>
- FLUAD® product monograph and Segirus information for the public

8. Where can members of the public who are not eligible for publicly funded FLUZONE® High-Dose Quadrivalent access the vaccine?

FLUZONE® High-Dose Quadrivalent may be available for purchase through pharmacies and travel clinics throughout BC.

References

- 1. Centers for Disease Control and Prevention. ACIP Flu Meeting Update: Flu Vaccines Worked Better than Reported & ACIP Recommends Specific Vaccines For Seniors 2022 [cited 2022 July 25]. Available from: https://www.cdc.gov/flu/spotlights/2021-2022/specific-vaccines-seniors.htm.
- 2. Public Health Agency of Canada. Canadian Immunization Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2022–2023. 2022 [cited 2022 July 22]. Available from: https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/canadian-immunization-guide-statement-seasonal-influenza-vaccine-2022-2023.
- 3. Grohskopf L. Influenza Vaccines for Older Adults: GRADE Summary: Center for Disease Control and Prevention; 2022 [cited 2022 July 22]. Available from: https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2022-02-23-24/04-influenza-grohskopf-508.pdf.