



### Public Health Agency of Canada Webinar: Seasonal Influenza 2022-2023

**September 28, 2022** 



### Housekeeping

Please use the Q&A tab to pose questions to presenters at any time For technical and troubleshooting questions please contact: <a href="mailto:nccid@umanitoba.ca">nccid@umanitoba.ca</a>

Webinar recording and slides will be made available after the webinar at nccid.ca



National Collaborating Centre for Infectious Diseases

Centre de collaboration nationale des maladies infectieuses

# Webinar: Seasonal Influenza 2022-2023 September 28, 2022

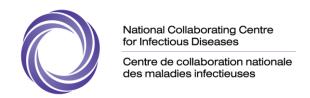
### **Speakers:**

Dr. Jesse Papenburg, MD, FRCPC – Chair, influenza working group at National Advisory Committee on Immunization (NACI)

Dr. Robyn Harrison, MD, MSc, FRCPC – Vice-Chair, National Advisory Committee on Immunization (NACI)

#### **Moderator:**

Claudyne Chevrier, PhD– National Collaborating Centre for Infectious Diseases (NCCID)



### Disclosures of conflicts of interest

- Dr. Jesse Papenburg: research grants MedImmune & Merck; participation on scientific steering committee - AbbVie
- Dr. Robyn Harrison: no conflicts of interest to declare
- Claudyne Chevrier: no conflicts of interest to declare

### Webinar objectives

### At the end of this webinar, participants will be able to:

- 1. Discuss with patients the importance of seasonal influenza vaccination.
- 2. Identify and address barriers to seasonal influenza vaccine uptake.
- 3. Apply the National Advisory Committee on Immunization (NACI) recommendations on seasonal influenza vaccine use for the 2022-2023 season.
- 4. Identify where to access NACI and relevant Public Health Agency of Canada resources relevant to vaccination during the 2022-23 season.

## Setting the stage: What is the burden of influenza and which populations are at highest risk?

### Burden of influenza before the COVID-19 pandemic

Burden of influenza varies from year to year.

### **Globally**

Every year, worldwide seasonal influenza causes an estimated:

- 1 billion infections
- o 3 to 5 million cases of severe illness
- o 290,000 to 650,000 deaths

The global annual attack rate was estimated to be 5–10% in adults and 20–30% in children.

In Canada

Influenza and pneumonia are ranked among the top 10 leading causes of death in Canada.

Each year in Canada, it is estimated that influenza causes approximately:

- o 3,500 deaths
- 12,200 hospital stays



The influenza burden has been at historical lows during COVID-19.

In 2022-23 there is a possibility of simultaneous outbreaks of influenza and COVID-19 in Canada. Minimizing influenza-related morbidity and mortality will reduce the burden on the health care system.

World Health Organization - Influenza (Seasonal)

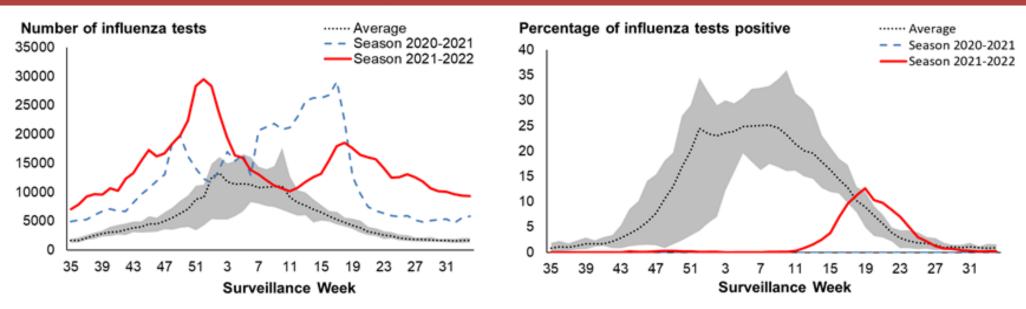
## The COVID-19 pandemic and associated health measures impacted influenza patterns for the 2021-2022 season

The burden of influenza was at historical lows during COVID-19.

A return of community transmission of influenza was observed in the 2021-2022 season.

The resurgence of seasonal influenza did not follow usual seasonal patterns.

### Number of influenza tests and percentage of laboratory tests positive in Canada, by surveillance week, 2021-35 to 2022-34



Red line: 2021-22 flu season // Blue dotted line: 2020-21 season // Shaded grey area : pooled values from past influenza seasons

Canada.ca - FluWatch report: July 24 to August 27, 2022 (weeks 30-34)

### 2021-2022 seasonal influenza in Canada

- Community circulation of seasonal influenza returned to Canada during the 2021-2022 influenza season.
- Canada experienced an influenza epidemic that began in week 16 (mid-April) and lasted only nine weeks.
   The epidemic was driven by influenza A(H3N2), was exceptionally late in the season, low in intensity, and short in length.
- In contrast, typical influenza season starts over the fall and peaks in the winter months.
- Overall, flu vaccination coverage among all adults aged 18 years and older for the 2021-2022 flu season (39%) has not changed significantly from previous years.
- The national flu vaccination coverage goal of 80% for those at higher risk remains unmet. Despite a higher flu shot uptake among seniors (71%), little improvement has been achieved in recent years.

Bancej & al (2022) – National FluWatch mid-season report, 2021–2022: Sporadic influenza activity returns Canada.ca – Seasonal Influenza (Flu) Vaccination Coverage Survey results 2021-2022

### Typical influenza symptoms

Most common symptoms include:

- fever
- cough
- muscle aches and pains

Other common symptoms include:

- headache
- chills or feeling feverish
- fatigue
- loss of appetite
- sore throat
- runny or stuffy nose



In some people, especially children, nausea, vomiting and diarrhea may occur.

While most people recover in 7 to 10 days, severe illness can develop. Some groups are at increased risk of influenza-related complications and hospitalization.

## Influenza A and B are the main influenza types that cause seasonal outbreaks in humans

**Influenza A** viral strains are classified into subtypes based on two surface proteins:

- haemagglutinin (HA)
- neuraminidase (NA)

Among them, the influenza A viruses that have caused widespread human disease over the decades are:

- 3 subtypes of HA (H1, H2 and H3)
- 2 subtypes of NA (N1 and N2)

**Influenza B** viral strains have evolved into 2 lineages:

- B/Yamagata/16/88-like viruses
- B/Victoria/2/87-like viruses

Over time, antigenic variation (antigenic drift) of strains occurs within an influenza A subtype or B lineage.

"Antigenic shift" due to a reassortment of genes can also occur. This can cause an abrupt, major change in an influenza A virus.

## Every year, seasonal influenza vaccines are developed in response to year-over-year changes of the influenza virus

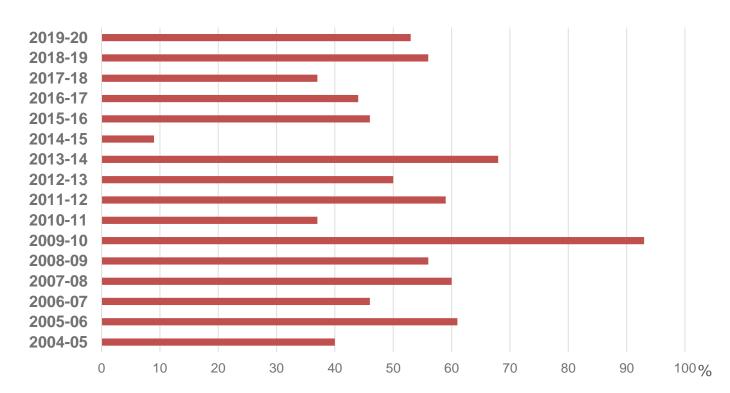
- The ever-present possibility of antigenic drift requires seasonal influenza vaccines to be reformulated annually.
- Based on global surveillance observations, the World Health Organization establishes which virus components to include in the vaccine for the northern and southern hemispheres.
- Influenza vaccines are therefore based on best predictions for the upcoming influenza season and efficacy can vary year to year.
- Several influenza strains can be included in a vaccine.
  - Trivalent vaccine = includes three strains
  - Quadrivalent vaccine = includes four strains
- Viruses circulating within a population can sometimes change during the flu season.
  - o If this happens, the flu shot may not work as well as expected.
  - o The health and age of the person can also affect how effective the vaccine is for that person.
- · Vaccine-induced immunity to influenza wanes over time.

### Influenza vaccine effectiveness

- People who have received the flu vaccine and still contract the flu are less likely to suffer serious flu-related complications or require hospitalization.
- The body's immune response to influenza vaccination is transient and may not persist beyond a year which is another reason why influenza vaccines are needed each year.

Canadian Sentinel Practitioner Surveillance Network (SPSN) influenza vaccine effectiveness estimates % (95%CI) 2004-05 to 2019-20 seasons (any influenza type/subtype)





BC Centre for Disease Control, bccdc.ca - Sentinel Network (SPSN)

## World Health Organization (WHO) recommendations for influenza vaccine composition for 2022-2023

 Quadrivalent influenza vaccines for use in the 2022-23 northern hemisphere flu season contain the following:

### **Egg-based vaccines**

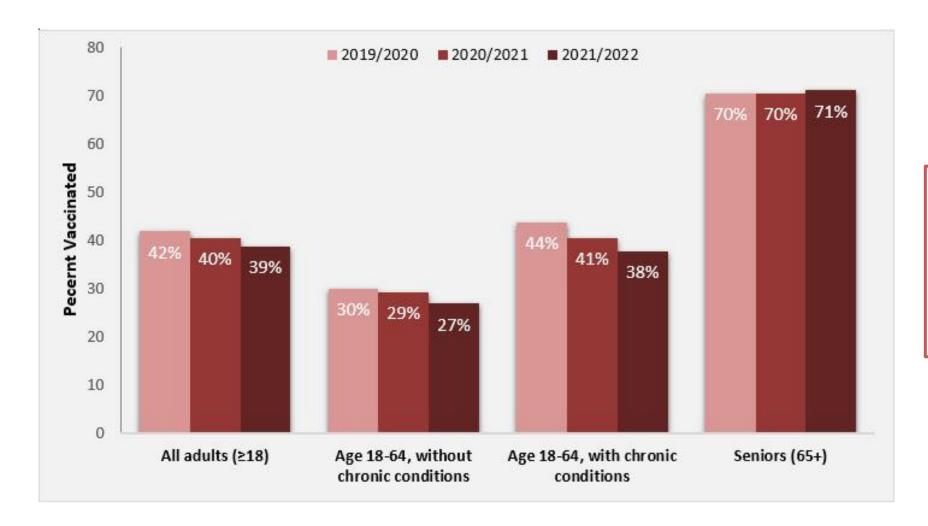
- A/Victoria/2570/2019 (H1N1)pdm09like virus
- A/Darwin/9/2021 (H3N2)-like virus
- B/Austria/1359417/2021
   (B/Victoria lineage)-like virus
- B/Phuket/3073/2013
   (B/Yamagata lineage)-like virus

### Cell culture or recombinantbased vaccines

- A/Wisconsin/588/2019 (H1N1)pdm09-like virus
- A/Darwin/6/2021 (H3N2)-like virus
- B/Austria/1359417/2021
   (B/Victoria lineage)-like virus
- B/Phuket/3073/2013 (B/Yamagata lineage)-like virus
- For **trivalent** influenza vaccines for use in the 2022-2023 northern hemisphere influenza season, the WHO recommends that the A(H1N1)pdm09, A(H3N2) and B/Victoria lineage viruses noted above be used for the quadrivalent vaccines.

WHO - Recommended composition of influenza virus vaccines for use in the 2022-2023 northern hemisphere influenza season

### Canada's Vaccination Coverage Survey results 2021-2022



Canada's goal is to have
80% of those who are at
higher risk of
complications from
influenza vaccinated. We
still have progress to
make to reach that target.

Canada.ca - Seasonal Influenza (Flu) Vaccination Coverage Survey results, 2021-2022



### Key takeaways – impact of influenza

- Influenza can lead to severe complications, including hospitalization and death (especially in high-risk populations).
  - Most people recover fully in 7–10 days.
- For best possible protection, it is recommended to get the influenza vaccine annually.
  - Circulating strains of influenza tend to change from year to year.
  - Vaccination can help prevent influenza and its complications and to prevent transmission to others.
  - The effectiveness of influenza vaccine may not persist beyond a year.



### Key takeaways – impact of influenza

- Community circulation of seasonal influenza returned to Canada during the 2021-2022 influenza season and it is expected that COVID-19 and influenza may co-circulate this influenza season.
- Despite the decline, sporadic influenza activity continues to be reported in many regions across the country.
- The potential co-circulation of influenza and COVID-19 raises concerns for high-risk populations and health care capacity especially in the current health care system context.

## Interactive Poll (true or false)

Some groups, such as those 65 years of age and older and adults with chronic medical conditions, are at increased risk of influenza-related complications and hospitalization.



# Health care provider role in vaccine uptake: Identifying and addressing barriers

## Conversations about the seasonal influenza vaccine might look a little different than before the COVID-19 pandemic



People may want to know what kind of vaccine the flu shot is, what brand it is, how it works, and how effective it is.

Be prepared to answer questions with plain language and accurate information, in a culturally sensitive and age-appropriate manner.

Provide information on possible severe impacts of the disease versus overall effectiveness of the vaccines.

Be prepared to discuss potential risks from the influenza vaccine and concurrent administration of other vaccines.

### Key factors that can influence vaccine hesitancy

The reasons for vaccine hesitancy are varied and complex.

The '5C' model summarizes the key factors that can influence vaccine hesitancy.

### The 5Cs of vaccine hesitancy

**Confidence**: level of trust in the effectiveness and safety of vaccines, the systems that delivers vaccines and the motives of those who establish vaccine policies.

**Complacency**: perception that risks of vaccine-preventable disease are low and vaccines are not necessary.

**Convenience**: extent to which vaccines are available, affordable, accessible, and individuals' ability to understand (as a reflection of language and health literacy) the need for vaccinations.

**Calculation**: individual engagement in extensive information searching and evaluation of risks of infections vs. vaccination.

Collective responsibility: extent to which one is willing to protect others by one's own vaccination.

## Discussions on vaccine confidence start by identifying a person's knowledge, attitudes and beliefs towards flu vaccines

The Seasonal Influenza Vaccination Coverage Survey is conducted every year to collect information on influenza vaccine uptake in Canada. The following data points are taken from the most recent survey, for which data collection took place between January 4 and February 11, 2022.



The most commonly reported reason among all adults for <u>not</u> getting their flu shot is they are healthy and/or they never get the flu (23%).



The majority of the population (67%) stated that the COVID-19 pandemic has no impact on their likelihood of getting the flu shot this year.



92% of the respondents believed that the flu shot is safe, but 38% of them **believe they might get the flu from the flu vaccine** and 35% agreed that the flu vaccine does not protect them against getting the flu.

## Understanding the factors that are preventing people from getting vaccinated is key to starting supportive discussions on vaccines



- 1. Be transparent about the risks and benefits of vaccination and inform patients of the risks of not getting vaccinated.
- 2. Cultivate a "safe space" for discussions about vaccination. Try engaging in active listening and creating opportunities to learn about patients' questions, values and experiences related to vaccination.
- 3. Activate the "right" emotions. Be intentional about tapping into positive emotions (hope, love, pride and the concern for others) rather than evoking shame, sadness or guilt. Avoid judgement and labels.

To learn more about addressing vaccine hesitancy in your practice visit the canada.ca webpage:

Addressing vaccine hesitancy in the context of COVID-19: A primer for health care providers



### Key takeaways – addressing vaccine hesitancy

- **Discuss** the importance of flu vaccines with your patients, especially if they are:
  - at increased risk of influenza-related complications
  - capable of transmitting influenza to those at high risk
  - at high risk of severe COVID-19 illness
  - providing essential community services
- Seek to understand the factors that are preventing an individual from getting vaccinated by starting respectful, culturally sensitive, and age-appropriate discussions on vaccines, which take into account their diverse needs.
- Use the 5 C's of vaccine confidence to identify and address barriers to vaccine uptake (confidence, complacency, convenience, calculation, collective responsibility).

# Interactive Poll (true or false)

According to the 2021-2022 Vaccine Coverage survey:

The most commonly reported reason among all adults for <u>not</u> getting their flu shot is that they are healthy and/or they never get the flu.



# National Advisory Committee on Immunization (NACI) Recommendations

### **About the National Advisory Committee on Immunization (NACI)**

- NACI is an expert advisory body that provides independent advice to the Public Health Agency of Canada (PHAC) on the optimal use of vaccines in Canada.
  - o NACI makes recommendations for the vaccination of individuals and vaccine programs.
  - o Provinces and Territories are responsible for their vaccine policies and immunization programs.
  - It is normal for NACI recommendations to be broader or narrower than the conditions of use approved by Health Canada.
- Every year, NACI issues a statement on seasonal influenza vaccine. It informs health care providers on optimal use of the vaccines available for influenza in Canada based on the most up to date information available.
  - To find the 2022-2023 statement, see the <u>Canadian Immunization Guide (CIG) Chapter on Influenza</u> and Statement on Seasonal Influenza Vaccine for 2022-2023.
- PHAC's <u>Guidance on the use of the influenza vaccine in the context of COVID-19</u> were also developed in consultation with NACI.

### Who should receive the influenza vaccine?

People 6 months of age and older who do not have contraindications to the vaccine, particularly:



People at high risk of influenza-related complications or hospitalization



People capable of transmitting influenza to those at high risk



Others at risk of exposure

Canada.ca - Canadian Immunization Guide (CIG) Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2022-2023



## People at high risk of influenza-related complications or hospitalization

### Adults and children with high-risk chronic health conditions:

- cardiac or pulmonary disorders
- diabetes mellitus and other metabolic diseases
- cancer
- immune compromising conditions
- neurologic or neurodevelopment conditions
- renal disease
- anemia or hemoglobinopathy
- morbid obesity (BMI of 40 and over)
- children 6 months to 18 years of age undergoing treatment for long periods with acetylsalicylic acid

### **Groups at high risk:**

- all children 6-59 months of age
- people who are pregnant
- people of any age who are residents of nursing homes and other chronic care facilities
- adults 65 years of age and older
- Indigenous Peoples



## People capable of transmitting influenza to those at high risk

Health care providers and other care providers in facilities and community settings, including paid and unpaid:

- health care workers
- emergency response workers
- continuing / long-term care facility workers
- home care workers
- students in health care fields
- volunteers and frequent visitors

Due to their occupation and close contact with people who may be infected with influenza, they are themselves at increased risk of infection.



## People capable of transmitting influenza to those at high risk

Household contacts, both adults and children, of individuals at high risk, whether the individual at high risk has been vaccinated or not, for example:

- those providing regular child care to children 0–59 months of age, whether in or out of the home
- those who provide services within closed or relatively closed settings to people at high risk (e.g., crew on a ship)



### Others at risk of exposure

- People who provide essential community services
- People in direct contact with poultry infected with avian influenza during culling operations



### Seasonal influenza vaccine schedule

Population	1 dose	2 doses (4 weeks interval)
Adults and children 9 years of age and older	X	
Children 6 months to less than 9 years of age who have never received the influenza vaccine in a previous influenza season		X
Children 6 months to less than 9 years of age who have been vaccinated with 1+ doses in any previous influenza season	X	

### New or updated information for 2022-2023

New Information	Updated Information
Inclusion of recombinant quadrivalent seasonal influenza vaccine Supemtek™ (RIV4) is the first and, to date, the only recombinant influenza vaccine licensed in Canada. It may be considered for use among the quadrivalent influenza vaccines offered to adults 18 years of age and older.	Age indication Flucelvax® Quad Flucelvax® Quad (IIV4-cc) standard dose mammalian cell culture-based quadrivalent inactivated influenza vaccine is now authorized by Health Canada for use in adults and children 6 months and older.
Guidance on the use of seasonal influenza vaccine in the presence of COVID-19  NACI guidance outlines that administration of COVID-19 vaccines may occur at the same time as, or at any time before or after influenza immunization (including all seasonal influenza vaccines or LAIV) for those aged 5 years and older.	Age indication Influvac® Tetra Influvac® Tetra (IIV4-SD) egg-based, subunit, quadrivalent inactivated influenza vaccine is now authorized by Health Canada for use in adults and children 6 months and older.
The types of influenza vaccines available in Canada for the 2022-2023 season For more information see Slide 52.	NACI statements for the expanded indications of both Flucelvax® Quad and Influvac® Tetra have not yet been released but are expected in the forthcoming in the next iteration of the Influenza Statement (2023-2024).

Canadian Immunization Guide chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2022–2023

### Who should <u>not</u> receive the influenza vaccine?

- People who have had an anaphylactic reaction to any of the vaccine components, with the exception of egg.
- People who have developed Guillain-Barré Syndrome (GBS) within 6 weeks of a previous influenza vaccination, unless another cause was found for the GBS.
- Infants less than 6 months of age.

Note: The contraindications listed above are specific to **influenza vaccines**. To find contraindications for other vaccines, consult the relevant NACI statement, Canadian Immunization Guide and product monograph.

### Who should <u>not</u> receive a live attenuated influenza vaccine (LAIV)?

In addition to the contraindications mentioned in the previous slide, NACI recommends that LAIV should <u>not</u> be given to people with:

- **immune compromising conditions** due to underlying disease, therapy, or both (except for children with stable HIV infection on HAART and with adequate immune function)
- severe asthma defined as currently on oral or high-dose inhaled glucocorticosteroids or active wheezing
- children less than 24 months of age due to increased risk of wheezing following administration of LAIV or medically attended wheezing in the 7 days prior to the proposed date of vaccination, due to increased risk of wheezing

LAIV is **not** contraindicated for people with a history of stable asthma or recurrent wheeze.

## Who should <u>not</u> receive a LAIV?

- Children 2-17 years of age currently receiving aspirin or aspirin-containing therapy.
  - because of the association of Reye's syndrome with aspirin and wild-type influenza infection; aspirincontaining products in children less than 18 years of age should be delayed for 4 weeks after receipt of LAIV
- Individuals who are pregnant.
  - o because it is a live attenuated vaccine and there is a lack of safety data at this time

Note: LAIV is **not** contraindicated in breastfeeding individuals; however, there is limited data for the use of LAIV in lactating individuals

## Who should <u>not</u> receive a LAIV?

- LAIV should **not** be administered:
  - o until 48 hours after antiviral agents active against influenza (e.g., oseltamivir, zanamivir) are stopped,
  - o <u>and</u> those antiviral agents, unless medically indicated, should not be administered until 2 weeks after receipt of LAIV.

This is so that the antiviral agents do not inactivate the replicating vaccine virus.

- If the above anti-viral agents are administered from 48 hours pre-vaccination with LAIV to 2 weeks post-vaccination:
  - o revaccination should take place at least 48 hours after the antivirals are stopped, or
  - o inactivated influenza vaccine (IIV) could be given at any time.

# NACI recommended dose and route of administration, by age, for influenza vaccine types authorized for the 2022–2023 influenza season

Age group	Influenza vaccine type (route of administration)							
	IIV3-SD or IIV4- SD (IM)	IIV4-cc (IM)	IIV3-Adj (IM)	IIV4-HD (IM)	RIV4 (IM)	LAIV4 (intranasal)	doses required	
6–23 months	0.5 mL	-	0.25 mL	-	-	-	1 or 2	
2–8 years	0.5 mL	0.5 mL	-	-	-	0.2 mL (0.1 mL per nostril)	1 or 2	
9–17 years	0.5 mL	0.5 mL	-	-	-	0.2 mL (0.1 mL per nostril)	1	
18–59 years	0.5 mL	0.5 mL	-	1	0.5 mL	0.2 mL (0.1 mL per nostril)	1	
60–64 years	0.5 mL	0.5 mL	-	-	0.5 mL	-	1	
65 years and older	0.5 mL	0.5 mL	0.5 mL	0.7 mL	0.5 mL	-	1	

To learn more about specific recommendations on the choice of seasonal influenza vaccine visit the canada.ca webpage:

Canadian Immunization

Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2022–2023

**Abbreviations:** IIV3-Adj: adjuvanted trivalent inactivated influenza vaccine; IIV4-cc: quadrivalent mammalian cell-culture based inactivated influenza vaccine; IIV4-HD: high-dose quadrivalent inactivated influenza vaccine; IIV3-SD: standard-dose trivalent inactivated influenza vaccine; IIV4-SD: standard-dose quadrivalent inactivated influenza vaccine; RIV4: quadrivalent recombinant influenza vaccine; IM: intramuscular; LAIV4: quadrivalent live attenuated influenza vaccine.



## Key takeaways – NACI recommendations

- NACI has issued recommendations for health care providers on the appropriate selection of seasonal influenza vaccine for the 2022-2023 season, including:
  - o information on seasonal influenza and influenza vaccines
  - o vaccine products recommended for specific groups and ages
  - contraindications
  - o dosage and routes of administration
- See the complete recommendations on the choice of seasonal influenza vaccine and more in the <u>Canadian Immunization Guide Chapter on</u> <u>Influenza and Statement on Seasonal Influenza Vaccine for 2022–2023.</u>

### **Interactive Poll**

Which one of the following is the Live Attenuated Vaccine (LAIV) intranasal vaccine contraindicated for?

- A) children over 24 months of age
- B) people who are pregnant
- C) people with mild asthma



## **Antiviral Agents**

#### Are antivirals recommended to treat influenza?

- In the event someone does get the flu, antivirals can be taken to decrease symptoms and outcomes of the flu.
- Most people with influenza will become only mildly ill and do not need medical care or antiviral medication.
- Health care providers may wish to consider prescribing antiviral drugs to reduce influenza morbidity and mortality, especially for people at higher risk for influenza, or who are severely ill.
- The use of antivirals will depend on a number of factors, such as:
  - patient risk
  - relevant history
  - duration and severity of symptoms

## Which antivirals are approved in Canada for the treatment of influenza?

Oseltamivir (oral)	<ul> <li>oral capsule, liquid suspension</li> <li>persons 1 year and older</li> <li>generic version available</li> </ul>
Zanamivir (inhalation)	<ul> <li>powder for oral inhalation through a plastic device</li> <li>aged ≥7 years</li> <li>not recommended in patients with airway diseases (e.g., asthma, COPD)</li> </ul>
Peramivir (IV)	<ul> <li>given intravenously (approved but not marketed in Canada)</li> <li>aged ≥2 years</li> </ul>
Baloxavir Marboxil (PO)	<ul> <li>oral tablets (1 dose)</li> <li>aged ≥12 years (approved but not marketed in Canada)</li> </ul>

<sup>\*</sup> All circulating viruses (H3N2, H1N1pdm09, and B) are resistant to adamantanes.

Aoki & al (2022) 2021–2022 AMMI Canada guidance on the use of antiviral drugs for influenza in the COVID-19 pandemic setting in Canada

## General principles on influenza antiviral therapy

The following recommendations are based on the Association of Medical Microbiology and Infectious Disease Canada (AMMI) *Guidance on the use of antiviral agents for the 2019-2020 influenza season.* 

- Antivirals should be initiated as rapidly as possible after onset of illness as the benefits of treatment are much greater with initiation at <12 hours than at 48 hours. (Strong recommendation, Grade B evidence).
- Antiviral therapy should be initiated even if the interval between illness onset and administration of antiviral medication >48 hours if the illness is:
  - severe enough to require hospitalization
  - o progressive, severe or complicated, regardless of previous health status or if the individual is from a group at high risk for severe disease (**Strong recommendation**, **Grade X evidence**).

Aoki & al (2019) - Use of antiviral drugs for seasonal influenza: Foundation document for practitioners – Update 2019

## General principles on influenza antiviral therapy

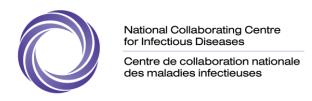
- Otherwise healthy patients with relatively mild, self-limited influenza are NOT likely to benefit from NAI therapy initiated > 48 hours after illness onset (**Option, Grade D evidence**).
- Patients not initially given antiviral therapy should be advised of symptoms and signs of worsening illness that might warrant reassessment (**Recommendation**, **Grade D evidence**).
- Treatment duration should routinely be 5 days (Strong Recommendation, Grade A evidence), but may be continued longer than 5 days if clinically indicated (Option, Grade C evidence).

For full AMMI Canada guidance on the use of antiviral drugs for seasonal influenza visit: <a href="https://ammi.ca/en/resources/">https://ammi.ca/en/resources/</a>

Aoki & al (2019) - Use of antiviral drugs for seasonal influenza: Foundation document for practitioners – Update 2019

## **Question and Answer Session**

- Use the Q&A tab to pose content related questions to presenters
- "Like" other people's questions to push them up in priority



## Thank you!

Please complete our short webinar evaluation survey when you leave.

Link to recording/slides will be available at **nccid.ca** after the webinar.

Visit nccid.ca to register for the French webinar on Seasonal Influenza 2022-2023 scheduled for September 29, 2022, at 1:00 pm Eastern Time.

## Visit nccid.ca for more and upcoming PHAC webinars



## SUPPLEMENTAL SLIDES

#### **Abbreviations**

- IIV: inactivated influenza vaccine
- IIV3: trivalent inactivated influenza vaccine
- IIV3-Adj: adjuvanted egg-based trivalent inactivated influenza vaccine
- **IIV3-HD**: high-dose egg-based trivalent inactivated influenza vaccine
- IIV3-SD: standard-dose egg-based trivalent inactivated influenza vaccine
- **IIV4**: quadrivalent inactivated influenza vaccine
- IIV4-cc: standard-dose cell culture-based quadrivalent inactivated influenza vaccine
- IIV4-HD: high-dose egg-based quadrivalent inactivated influenza vaccine
- IIV4-SD: standard-dose egg-based quadrivalent inactivated influenza vaccine
- LAIV: live attenuated influenza vaccine
- LAIV3: egg-based trivalent live attenuated influenza vaccine
- LAIV4: egg-based quadrivalent live attenuated influenza vaccine
- RIV: recombinant influenza vaccine
- RIV4: recombinant quadrivalent influenza vaccine

# Which seasonal influenza vaccines are available in Canada for the 2022-2023 flu season?

IIV4-SD	IIV4-cc	IIV3-Adj	IIV4-HD	LAIV4	RIV4
<ul> <li>Flulaval® Tetra (6 months and older)</li> <li>Fluzone® Quadrivalent (6 months and older)</li> <li>Afluria® Tetra (5 years and older)</li> <li>Influvac® Tetra (6 months and older)</li> </ul>	- Flucelvax® Quad (6 months of age and older)	<ul> <li>Fluad Pediatric®         (6months-         23 months</li> <li>Fluad® (65 years and older)</li> </ul>	- Fluzone® High-Dose Quadrivalent (65 years and older)	- FluMist® Quadrivalent (2-59 years)	- Supemtek™ (18 years and older)

Note: Not all products will be made available in all jurisdictions and availability of some products may be limited.

# Which seasonal influenza vaccines are <u>not</u> available in Canada for the 2022-2023 flu season?

IIV3-HD formulations will not be authorized or available for use in Canada during the 2022-2023 influenza season.

The following IIV3-SD formulations are authorized but will not be available for use in Canada during the 2022-2023 influenza season:

- Agriflu® (6 months and older)
- Fluviral<sup>®</sup> (6 months and older)

## Seasonal influenza guidance

NACI statement on seasonal influenza vaccine for 2022–2023:

Canadian Immunization Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2022–2023 - Canada.ca

2021-2022 AMMI Canada guidance on use of antiviral drugs for influenza in the COVID-19 Pandemic setting in Canada:

https://jammi.utpjournals.press/doi/pdf/10.3138/jammi-2022-01-31



2021–2022 AMMI Canada guidance on the use of antiviral drugs for influenza in the COVID-19 pandemic setting in Canada

Fred Y Aoki MD<sup>1</sup>, Jesse Papenburg MD<sup>2,3</sup>, Samira Mubareka MD<sup>4</sup>, Upton D Allen MBBS<sup>5,6,7</sup>, Todd F Hatchette MD<sup>8</sup>, Gerald A Evans MD<sup>9</sup>



#### Seasonal influenza awareness resources

The **Public Health Agency of Canada** offers free resources for health professionals:

- Flu (influenza): For health professionals
- Seasonal Influenza Vaccine Recommendations from the National Advisory Committe
- Guidance on the use of influenza vaccine in the presence of COVID-19
- Flu awareness posters for printing and social media accessories to share

... and social media posts for flu awareness:

- Healthy Canadians on Facebook
- Public Health Agency of Canada on LinkedIn
- @GovCanHealth and @CPHO\_Canada on Twitter
- <u>@HealthyCdns</u> on Instagram
- Healthy Canadians on YouTube



## Fluwardh Sentinel Practitioners

Are you a physician or nurse involved in primary care?

You can help monitor the ILI across Canada and help us understand the effects of COVID-19 on seasonal respiratory viruses.

With more data, FluWatch can better detect signals of increased or unusual ILI activity.

Canada needs your ILI data!

Sign up today for a more prepared tomorrow!

Email: <u>fluwatch-epigrippe@phac-aspc.gc.ca</u>

# **Flu Watchers**Canadian volunteers

Not a physician or nurse?

You can still help monitor ILI and COVID-19 in Canada as a FluWatcher!

FluWatchers answer 2 yes/no questions each week to help show Canadians when and where ILI and COVID-19 activity is occurring in Canada.



Canada needs more FluWatchers!

The more volunteers that report,

the more accurate the data

Google "FluWatchers" for more info and to sign up!

### Seasonal influenza awareness resources



Free resources for frontline providers, available for download <a href="https://immunize.ca/influenza-campaign">https://immunize.ca/influenza-campaign</a>

Immunize Canada is a national coalition of non-governmental, professional, health, government and private sector organizations with a specific interest in promoting the understanding and use of vaccines recommended by the National Advisory Committee on Immunization (NACI).

## Vaccine Injury Support Program (VISP)

- All vaccines used in Canada are regulated by Health Canada and must meet rigorous standards for safety, efficacy and quality before their use is authorized. Unfortunately, while rare, serious adverse events can occur.
- The Vaccine Injury Support Program (VISP) ensures that all people in Canada who
  have experienced a serious and permanent injury as a result of receiving a Health
  Canada authorized vaccine, administered in Canada, on or after December 8, 2020,
  have fair and timely access to financial support.
- Serious and permanent injury:
  - severe, life-threatening or life-altering injury that may require in-person hospitalization, or a prolongation of existing hospitalization, and
  - results in persistent or significant disability or incapacity, or where the outcome is a congenital malformation or death



https://vaccineinjurysupport.ca/en

### References

- Aoki, F., Allen, U., Mubareka, S., Papenburg, J., Stiver, G., & Evans, G. (2019). Use of antiviral drugs for seasonal influenza: Foundation document for practitioners Update 2019. *Official Journal of the Association of Medical Microbiology and Infectious Disease Canada*. *4*(2), 60-82. <a href="https://jammi.utpjournals.press/doi/10.3138/jammi.2019.02.08">https://jammi.utpjournals.press/doi/10.3138/jammi.2019.02.08</a>
- Aoki, F., Papenburg, J., Mubareka, S., Allen, U., Hatchette, T., & Evans., G. (2022). 2021–2022 AMMI Canada guidance on the use of antiviral drugs for influenza in the COVID-19 pandemic setting in Canada. *Official Journal of the Association of Medical Microbiology and Infectious Disease Canada*. 7(1), 1-7. <a href="https://doi.org/10.3138/jammi-2022-01-31">https://doi.org/10.3138/jammi-2022-01-31</a>
- Bancej, C., Rahal, A., Lee, L., Buckrell, S., Schmidt, K., & Bastien, N. (2022). National FluWatch mid-season report, 2021–2022: Sporadic influenza activity returns. *Canadian Communicable Disease Report.* 48(1), 39-45. doi:10.14745/ccdr.v48i01a06
- Government of Canada. (2022, September 02). *Flu Warch report*. <a href="https://www.canada.ca/en/public-health/services/publications/diseases-conditions/fluwatch/2021-2022/weeks-30-34-july-24-august-27-2022.html">https://www.canada.ca/en/public-health/services/publications/diseases-conditions/fluwatch/2021-2022/weeks-30-34-july-24-august-27-2022.html</a>
- Government of Canada. (2022, June 8). *Government of Canada*. Retrieved from Canadian Immunization Guide Chapter on Influena and Statement on Seasonal Influenza Vaccine for 2022-2023: <a href="https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/canadian-immunization-guide-statement-seasonal-influenza-vaccine-2022-2023.html">https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/canadian-immunization-guide-statement-seasonal-influenza-vaccine-2022-2023.html</a>
- Government of Canada. (2022, July 11). Seasonal Influenza(Flu) Vaccination Coverage Survey results, 2021-2022. <a href="https://www.canada.ca/en/public-health/services/immunization-vaccines/vaccination-coverage/seasonal-influenza-survey-results-2021-2022.html">https://www.canada.ca/en/public-health/services/immunization-vaccines/vaccination-coverage/seasonal-influenza-survey-results-2021-2022.html</a>.
- Government of Canda. (2021, May 7). Addressing vaccine hesitancy in the context of COVID-19: A primer for health care providers. <a href="https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/vaccines/vaccine-hesitancy-primer.html">https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/vaccines/vaccine-hesitancy-primer.html</a>
- World Health Organization. (2018, November 6). Influenza (Seasonal). https://www.who.int/en/news-room/fact-sheets/detail/influenza-(seasonal)