The Public Health Agency of Canada Webinar:
Seasonal Influenza Immunization 2021-2022
October 27, 2021

Speakers: Dr. Robyn Harrison, Dr. Jesse Papenburg

Moderator: Annie Fleurant-Ceelen, RN

Zoom

Please use the Q&A tab to pose questions to presenters at any time
Please send technical and troubleshooting questions to nccid@umanitoba.ca
Webinar recording and slides will be available after the webinar at nccid.ca
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Disclosure of Conflict of interests from the past 3 years

• Speaker: Dr Robyn Harrison – Nothing to declare

• Dr. Jesse Papenburg – Research grants: MedImmune & Sanofi Pasteur; Participation on Scientific Steering Committee: AbbVie

• Moderator: Annie Fleurant-Ceelen – Nothing to declare
Webinar Objectives

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

1. Discuss the importance of seasonal influenza vaccination and COVID-19 vaccination during the COVID-19 pandemic

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 2021-2022 season

4. Identify where to access NACI advice, antiviral guidelines and other resources relevant to vaccination during the 2021-22 season
Setting the stage:
What is the burden of influenza and which populations are at highest risk?
### Burden of influenza prior to the COVID-19 Pandemic:

<table>
<thead>
<tr>
<th>Globally</th>
<th></th>
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<tbody>
<tr>
<td>Every year, worldwide seasonal influenza caused an estimated:</td>
<td></td>
</tr>
<tr>
<td>o 1 billion infections</td>
<td></td>
</tr>
<tr>
<td>o 3 to 5 million cases of severe illness</td>
<td></td>
</tr>
<tr>
<td>o 290,000 to 650,000 deaths</td>
<td></td>
</tr>
<tr>
<td>The global annual attack rate is estimated to be 5–10% in adults and 20–30% in children</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In Canada</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza and pneumonia are ranked among the top 10 leading causes of death in Canada.</td>
<td></td>
</tr>
<tr>
<td>Each year in Canada, it is estimated that influenza causes approximately:</td>
<td></td>
</tr>
<tr>
<td>o 12,200 hospital stays</td>
<td></td>
</tr>
<tr>
<td>o 3,500 deaths</td>
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</table>

In 2021-22 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.
In Canada, through 2020-2021, the number and % of influenza positive tests have been remarkably low compared to previous years:

- The number of tests performed was higher than the average. Influenza percent positivity did not exceed 0.1%
- Only 69 influenza detections were reported (in the six previous flu seasons, the average was 52,169)

Nwosu & al (2021) National Influenza Annual Report, Canada, 2021-2021, in the global context. doi.org/10.14745/ccdr.v47i10a02
2020-2021 Seasonal Influenza in Canada

• Globally, influenza circulation was at historically low levels in both the Northern and the Southern Hemispheres.

• The lower incidence of influenza cases in 2020-21 is not necessarily an indication that the 2021-22 flu season will be less severe.

  – Although it is difficult to predict when influenza will begin to re-circulate, given increased COVID-19 vaccination and relaxation of public health measures, an influenza resurgence can be expected and may be more severe or intense than recent seasons

    Nwosu & al (2021) doi.org/10.14745/ccdr.v47i10a02

  – This is predicted by several major modelling studies which suggests that a build up of susceptibility during the pandemic may result in large outbreaks, particularly affecting young children, in the coming years once non-pharmaceutical interventions are lifted or relaxed

    Baker & al (2020) doi.org/10.1073/pnas.2013182117
    The Academy of Medical Sciences (15 July 2021) acmedsci.ac.uk/file-download/4747802
Influenza symptoms typically include **sudden onset of**:

- high fever
- cough
- muscle aches and pains

Other common symptoms include:
- headache
- chills or feeling feverish
- fatigue
- loss of appetite
- sore throat
- coryza

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 viral strains that cause seasonal outbreaks in humans

**Influenza A** viral strains are classified into subtypes based on 2 surface proteins:
- haemagglutinin (HA)
- neuraminidase (NA)

Of these, 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 reassortment of genes can cause abrupt, major change in a flu A virus.
Every year, seasonal influenza vaccines are developed in response to year-over-year changes of the influenza virus

- Based on global surveillance observations, the World Health Organization establishes which virus components to include in the vaccine for the northern and southern hemisphere.

- Several influenza strains can be included in a vaccine
  - Trivalent vaccine = includes 3 strains
  - Quadrivalent vaccine = includes 4 strains

- Viruses circulating within a population can sometimes change during the flu season.
  - If this happens, the flu shot may not work as well as expected.
  - The health and age of the person can also affect how effective the vaccine is for that person.

- The ever-present possibility of antigenic drift requires seasonal influenza vaccines to be reformulated annually.

- Vaccine-induced immunity wanes over the course of several months.
Influenza vaccines work

• 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 why influenza vaccines are needed each year.
Influenza Vaccine Composition for 2021-2022: WHO Recommendations

**Quadrivalent** influenza vaccines for use in the 2021-22 northern hemisphere flu season contain the following:

**Egg-based Vaccines**
- A/Victoria/2570/2019 (H1N1)pdm09-like virus;
- A/Cambodia/e0826360/2020 (H3N2)-like virus;
- B/Washington/02/2019 (B/Victoria lineage)-like virus; and
- B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

**Cell-based Vaccines**
- A/Wisconsin/588/2019 (H1N1)pdm09-like virus;
- A/Cambodia/e0826360/2020 (H3N2)-like virus;
- B/Washington/02/2019 (B/Victoria lineage)-like virus; and
- B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

- For **trivalent** influenza vaccines for use in the 2021-2022 northern hemisphere influenza season, the WHO recommends that the A(H1N1)pdm09, A(H3N2) and B/Victoria lineage viruses recommended above for the quadrivalent vaccines be used.
Canada’s current goal is to have 80% of those at higher risk of complications from influenza vaccinated. We still have progress to do to reach that target.

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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>All adults (≥18)</td>
<td>42%</td>
<td>42%</td>
<td>40%</td>
</tr>
<tr>
<td>Age 18-64, without chronic conditions</td>
<td>31%</td>
<td>30%</td>
<td>29%</td>
</tr>
<tr>
<td>Age 18-64, with chronic conditions</td>
<td>43%</td>
<td>44%</td>
<td>41%</td>
</tr>
<tr>
<td>Seniors (65+)</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Source: PHAC 2020-2021 Seasonal Influenza Vaccination Coverage Survey
Key takeways

- Vaccination can help prevent influenza and its complications and to prevent transmission to others.

- Although most people will recover fully from influenza infection in 7–10 days, influenza can lead to severe complications, including hospitalization and death (especially in populations at higher risk).

- Annual vaccination is required to provide the best possible protection against the viruses expected to circulate in that given year, and because the body’s immune response to influenza vaccination is transient and may not persist beyond a year.

- Through 2020-2021, the number and percentage of laboratory tests positive for influenza remained at exceptionally low levels. However, it is likely there will be an increase in influenza activity as we gradually move forward with reopening plans, and individuals reduce their use of personal protective measures.

- During the COVID-19 pandemic, it is important to minimize the morbidity and mortality related to potential influenza and COVID-19 co-circulation and to reduce the burden on the Canadian health care system to enhance the capacity to respond to ongoing COVID-19 activity.
Question 1: Seniors (65 years of age and older) and adults aged 18-64 years with chronic medical conditions are at increased risk of influenza-related complications and hospitalizations.

Question 2: Due to the nature of their work, primary health care providers may inadvertently transmit influenza to those at high risk through their activities.
HCP role in vaccine uptake:
identifying and addressing barriers
Seasonal influenza vaccine conversations might look a little different this year

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 impact of the disease severity versus overall effectiveness of the vaccines.

The spotlight on COVID-19 vaccine development and roll out in the last year may mean that people have more questions about the flu vaccine.
Why may people hesitate to get vaccinated?

- The reasons for vaccine hesitancy are varied and complex.
- The '5C' model summarizes the key factors that can influence vaccine hesitancy:

**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 most commonly reported reason among all adults for not getting their flu shot was they are healthy and/or they never get the flu (29%).

74% respondents agreed that the opinion of their family doctor, general practitioner or nurse practitioner is an important part of their decision for getting the flu shot.

91% of the respondents believed that the flu shot is safe, but 40% of them believed they might get the flu from the flu vaccine and 34% 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 respectful discussions on vaccines.

1. **Use presumptive statements** that convey the social norm of vaccination and the expectation that patients will vaccinate.

2. **Open up** about your own experiences getting vaccinated, vaccinating other patients and/or how you have chosen or encourage vaccination for your loved ones.

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.*

See: [Addressing vaccine hesitancy in the context of COVID-19: A primer for health care providers](#)
Poll

According to the 2020-2021 Vaccine Coverage survey

What percentage of respondents agreed that the opinion of their family doctor, general practitioner or nurse practitioner is an important part of their decision for getting the flu shot?

a) 26%
b) 52%
c) 74%
d) Unknown
NACI Recommendations
About the National Advisory Committee on Immunization (NACI)

• Expert advisory body that provides independent advice to the Public Health Agency of Canada on the optimal use of vaccines in Canada.
  – NACI makes recommendations for the vaccination of individuals and vaccine programs
  – 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

• Recommendations on the use of influenza vaccine in the context of COVID-19 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
- People at high risk of severe COVID-19 related illness
- Others
People at high risk of influenza-related complications or hospitalization

- All children 6-59 months of age
- Adults and children with high risk chronic health conditions
- 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

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

If you’re ill, stay home!

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 or not the individual at high risk has been vaccinated:
  - household contacts of individuals at high risk
  - household contacts of infants less than 6 months of age (these infants are at high risk but cannot receive influenza vaccine)
  - members of a household expecting a newborn during the influenza season

- 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)
People who are at risk of more severe disease or outcomes from COVID-19 are particularly vulnerable to co-infections with influenza and SARS-CoV-2.

For details, visit:
- Guidance on the use of influenza vaccine in the presence of COVID-19 - Canada.ca
- People who are at risk of more severe disease or outcomes from COVID-19 - Canada.ca
- COVID-19 signs, symptoms and severity of disease: A clinician guide - Canada.ca
• People who provide essential community services; and

• People in direct contact with poultry infected with avian influenza during culling operations.
## Seasonal Influenza Vaccine Schedule

<table>
<thead>
<tr>
<th>Population</th>
<th>1 dose</th>
<th>2 doses (4 weeks interval)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults and children 9 years of age and older</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children 6 months to less than 9 years of age who have <strong>never</strong> received the influenza vaccine in a previous influenza season</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Children 6 months to less than 9 years of age who have been vaccinated with 1+ doses in the past season</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
New or Updated Information for 2021–2022

New: All seasonal influenza vaccines, including LAIV, may be given either:

- at the same time as
- at any time before
- at any time after

the administration of other vaccines, including COVID-19 vaccines.

New: The types of influenza vaccines available in Canada for the 2021-2022 season along and associated age indications are listed in the supplement on slide 52.
New or Updated Information for 2021–2022

• **New** standard dose quadrivalent inactivated influenza vaccine (Influvac® Tetra) as an option for quadrivalent inactivated influenza vaccines for individuals 3 years of age and older

• **New** high dose quadrivalent inactivated influenza vaccine (Fluzone® High-Dose Quadrivalent) as an option for adults 65 years of age and older

• **New** recommendation and supporting evidence on the use of mammalian cell culture-based, inactivated seasonal influenza vaccine (Flucelvax® Quad) from the NACI Supplemental Statement – Mammalian Cell Culture-Based Influenza Vaccines.
  – Flucelvax® Quad recently authorized by Health Canada for use in persons ≥ 2 years of age
Who should not receive the influenza vaccine?

- People who have had an anaphylactic reaction to a previous dose of 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

Note: The contraindications listed above are specific to influenza vaccines. To find contraindications for other vaccines, consult the appropriate NACI statement and product monograph.
Who should **not** receive a live attenuated influenza vaccine (LAIV)?

In addition to the contraindications mentioned in the previous slide, NACI recommends that LAIV should not 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)

  or **medically attended wheezing in the 7 days prior** to the proposed date of vaccination:
  - because of the increased risk of wheezing;
  - LAIV is **not** contraindicated for people with a history of stable asthma or recurrent wheeze.

Continued on next slide
Who should not receive a LAIV? (continued)

- children less than 24 months of age, due to increased risk of wheezing

- 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; aspirin-containing products in children less than 18 years of age should be delayed for 4 weeks after receipt of LAIV.

- people who are pregnant;
  - 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 **not** receive a LAIV? (continued)

- LAIV should **not** be administered:
  - until 48 hours after antiviral agents active against influenza (e.g., oseltamivir, zanamivir) are stopped,
  - **and** 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:
  - revaccination should take place at least 48 hours after the antivirals are stopped, **or**
  - IIV could be given at any time.
### Specific recommendations on the choice of seasonal influenza vaccine are listed along with this table in:

- **Seasonal Influenza Vaccine Mobile Guide 2021-2022 Edition**

- **CCDR Summary** on the Seasonal Influenza Vaccine Statement 2021–2022 (doi.org/10.14745/ccdr.v47i09a04)

- **Canadian Immunization Guide Chapter on influenza and statement on seasonal influenza vaccine for 2021–2022**

<table>
<thead>
<tr>
<th>Age group</th>
<th>IIV3-SD IIV4 –SD (IM)</th>
<th>IIV4-cc (IM)</th>
<th>IIV3-Adj (IM)</th>
<th>IIV3-HD \textsuperscript{e} (IM)</th>
<th>IIV4-HD (IM)</th>
<th>LAIV4 (intranasal)</th>
<th>Number of doses required</th>
</tr>
</thead>
<tbody>
<tr>
<td>6–23 months</td>
<td>0.5 mL</td>
<td>-</td>
<td>0.25 mL</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1 or 2</td>
</tr>
<tr>
<td>2–8 years</td>
<td>0.5 mL</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.2 mL (0.1 mL per nostril)</td>
<td>1 or 2</td>
</tr>
<tr>
<td>9–17 years</td>
<td>0.5 mL</td>
<td>0.5 mL</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.2 mL (0.1 mL per nostril)</td>
<td>1</td>
</tr>
<tr>
<td>18–59 years</td>
<td>0.5 mL</td>
<td>0.5 mL</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.2 mL (0.1 mL per nostril)</td>
<td>1</td>
</tr>
<tr>
<td>60–64 years</td>
<td>0.5 mL</td>
<td>0.5 mL</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>≥ 65 years</td>
<td>0.5 mL</td>
<td>0.5 mL</td>
<td>0.5 mL</td>
<td>0.5 mL</td>
<td>0.7 mL</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

\*See presentation supplement for abbreviations
Key messages

• **Discuss** the importance of flu shots 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 people from getting vaccinated by starting respectful, culturally sensitive, and age-appropriate discussions on vaccines, which 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)
The National Advisory Committee on Immunization has issued recommendations for health care providers on the appropriate selection of seasonal influenza vaccine for the 2021-2022 season, including:

- Information on seasonal influenza and influenza vaccines
- Vaccine products recommended for specific groups and ages
- Contraindications
- Dosage and routes of administration

See the complete recommendations on the choice of seasonal influenza vaccine and more in:
- Seasonal Influenza Vaccine Mobile Guide 2021-2022 Edition
- Canadian Immunization Guide Chapter on influenza and statement on seasonal influenza vaccine for 2021–2022
Poll

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

a) People with a history of stable asthma.

b) People who are pregnant.

c) Children with stable HIV infection currently being treated with HAART and with adequate immune function.
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.

- Their use 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?

<table>
<thead>
<tr>
<th>Antiviral</th>
<th>Formulation</th>
<th>Age Requirements</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oseltamivir (oral)</td>
<td>Oral capsule, liquid suspension</td>
<td>Aged &gt;14 days</td>
<td>Generic version available</td>
</tr>
<tr>
<td>Zanamivir (inhalation)</td>
<td>Powder for oral inhalation through a plastic device</td>
<td>Aged ≥7 years</td>
<td>Not recommended in patients with airway diseases (eg asthma, COPD)</td>
</tr>
<tr>
<td>Peramivir (IV)</td>
<td>Given intravenously</td>
<td>Aged ≥2 years</td>
<td>(approved but not marketed in Canada)</td>
</tr>
<tr>
<td>Baloxavir Marboxil (PO)</td>
<td>Oral tablets (1 dose)</td>
<td>Aged ≥12 years</td>
<td>(approved but not marketed in Canada)</td>
</tr>
</tbody>
</table>

* All circulating viruses (H3N2, H1N1pdm09, and B) are resistant to adamantanes

Influenza Antiviral Therapy – General Principles (AMMI Canada, 2019)

• 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
  – Progressive, severe or complicated, regardless of previous health status
  – Or the individual is from a group at high risk for severe disease (Strong recommendation, Grade X evidence)

Influenza Antiviral Therapy – General Principles (AMMI Canada, 2019)

• 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: https://ammi.ca/en/resources/

Seasonal influenza awareness resources

The Public Health Agency of Canada offers free resources for frontline providers available at: Canada.ca/Flu

- Seasonal Influenza Vaccine Recommendations from the National Advisory Committee on Immunization (NACI) 2021-2022 Edition – Mobile guide
- Flu awareness posters for printing
- Social media accessories to share

... and social media posts for flu awareness:
- Healthy Canadians on Facebook
- Public Health Agency on LinkedIn
- @GovCanHealth and @CPHO_Canada on Twitter
- @HealthyCdns on Instagram
- Healthy Canadians on YouTube
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: fluwatch-epigrippe@phac-aspc.gc.ca

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!
Question and Answer Session

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

Send all troubleshooting questions to **nccid@umanitoba.ca**
Thank you!

Please **complete short webinar evaluation** when you leave

Link to recording/slides will be emailed to all registered through Eventbrite and will be available at nccid.ca after the webinar.

**Check nccid.ca for Upcoming Webinars**

PHAC Webinar on Seasonal Influenza 2021-2022

**Date:** October, 29, 2021  
*(French only)*
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;
• **LAIV4**: egg-based quadrivalent live attenuated influenza vaccine.
Which seasonal influenza vaccines are available in Canada for the 2021-2022 flu season?

<table>
<thead>
<tr>
<th>IIV4-SD</th>
<th>IIV4-cc</th>
<th>IIV3-Adj</th>
<th>IIV4-HD</th>
<th>LAIV4</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Flulaval® Tetra (6 months and older)</td>
<td>- Flucelvax® Quad (see details below*)</td>
<td>- Fluad® (65 years and older)</td>
<td>- Fluzone® High-Dose Quadrivalent (65 years and older)</td>
<td>- FluMist® Quadrivalent (2-59 years)</td>
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<td>- Fluzone® Quadrivalent (6 months and older)</td>
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<td>- Afluria® Tetra (5 years and older)</td>
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<tr>
<td>- Influvac® Tetra (3 years and older)</td>
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* Flucelvax® Quad vaccine:
  - now authorized by Health Canada for use in persons ≥2 years of age
  - currently recommended by NACI for use in adults and children 9 years and older
  - this updated authorized age for use supersedes the information for Flucelvax Quad found within the NACI Canadian Immunization Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2021–2022
  - NACI will be reviewing the current recommendations and supporting evidence on the use of Flucelvax Quad

Note: Not all products will be made available in all jurisdictions and availability of some products may be limited.
Which seasonal influenza vaccines are not available in Canada for the 2021-2022 flu season?

• The following IIV3-SD formulations are authorized but will not be available for use in Canada during the 2021-2022 influenza season:
  – Agriflu® (6 months and older)
  – Fluviral® (6 months and older)
  – Influvac® (3 years and older)

• The IIV3-HD formulation Fluzone® High-Dose (65 years and older) was previously authorized, but marketing of the vaccine has been discontinued as of February 2021

• The IIV3-Adj formulation Fluad Pediatric® (6–23 months) is authorized in Canada, however it is not being supplied for the 2021-2022 influenza season
Seasonal Influenza Guidance

NACI statement on seasonal influenza vaccine for 2021–2022:

AMMI Canada guidance on use of antiviral drugs for influenza:
Seasonal influenza awareness resources

Free resources for frontline providers, available for download https://immunize.ca/influenza-campaign

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).
Guidance on the use of influenza vaccine in the presence of COVID-19 - Canada.ca


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<td><strong>Graph:</strong> Sentinel Network (SPSN) <a href="http://www.bccdc.ca/Health-Info-Site/Pages/Diseases-Conditions/Flu-Influenza/Sentinel-Network-SPSN.aspx">http://www.bccdc.ca/Health-Info-Site/Pages/Diseases-Conditions/Flu-Influenza/Sentinel-Network-SPSN.aspx</a></td>
</tr>
<tr>
<td>Effect of Influenza Vaccination of Children on Infection Rates in Hutterite Communities A Randomized Trial <a href="https://jamanetwork.com/journals/jama/fullarticle/185509">https://jamanetwork.com/journals/jama/fullarticle/185509</a></td>
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References


Association of Medical Microbiology and Infectious Disease Canada (AMMI) website https://www.ammi.ca/


Algorithm for oseltamivir and zanamivir treatment of mild or uncomplicated influenza in adults (PDF) https://www.ammi.ca/Content/Guidelines/Flu_Algorithm.pdf

Canadian Critical Care Society’s guidance on managing patients with severe acute respiratory infection in an intensive care setting (PDF)

https://www.canadiancriticalcare.org/resources/Pictures/CCCS%20SARI%20Guidance%20January%202014.pdf


Use of antiviral drugs for seasonal influenza: Foundation document for practitioners – Update 2019