Fact Sheet:  
Influenza Vaccine - Live Attenuated (LAIV)

1. What is the live attenuated influenza vaccine (LAIV)?

There are several types of influenza vaccines available. LAIV is an approved vaccine administered by intranasal spray. It is approved for use in persons aged 2-59 years of age. The PEI influenza prevention program offers this vaccine for use in healthy children aged 2-17 years. LAIV is administered with half the dose being sprayed into each nostril.

2. What are the contents of LAIV?

LAIV contains the strains of influenza virus recommended each year for seasonal protection. Traces of non-medicinal ingredients are present to keep the product sterile and stable. There is no thimerosal or preservative in the vaccine and the packaging does not contain latex. The full list of contents of the vaccine is available in the product monograph which can be obtained from your health care provider.

3. What are the possible reactions to the LAIV?

The most common side effect of the intranasal influenza vaccine is nasal congestion or runny nose. Some individuals may experience symptoms including cough, decreased appetite, irritability, headache, and slight fever. These reactions are generally mild and last 1-2 days. If your symptoms persist for an extended period of time you should contact your health care provider for assistance.

It is not necessary to give acetaminophen (eg. Tylenol® or Tempra®) with every immunization. However, if your child is experiencing discomfort or fever, acetaminophen can relieve these symptoms.

In very rare instances a serious allergic reaction can occur requiring medical intervention from a health care provider. Your health care provider is able to quickly respond to this allergic reaction by administering adrenaline.

This type of reaction occurs within 15 minutes of receiving the vaccine. You will be asked to remain in the waiting room for 15 minutes after receiving LAIV.

4. What is influenza?

Influenza is a contagious viral infection which causes fever, headache, muscle and joint pain, sore throat, chest congestion and cough. About 10-20% of Canadians are infected with influenza each year. Infection due to influenza can lead to health complications, the most common being pneumonia. Approximately 3,500 deaths occur annually in Canada due to influenza related illness and complications.
5. **Who is recommended to receive the influenza vaccine?**

The National Advisory Committee on Immunization (NACI) recommends influenza vaccine for all Canadians, with particular emphasis on the following groups:

- people at high risk of influenza related complications or hospitalization including those with chronic illnesses, morbid obesity, cancer, immune suppression due to disease or therapy, those treated for long periods with acetylsalicylic acid (ASA), residents of nursing homes or facilities, those aged 65 years and older, children aged 6-59 months, pregnant women, those with neurologic or neurodevelopment conditions, and aboriginal peoples.

- those at risk of transmitting influenza to others including:
  1. health care workers and others providing care or services to high risk persons,
  2. household contacts of those at high risk of influenza related complications (eg. infants less than 6 months, pregnant women, immune suppressed or chronically ill patients as above)

- others who provide essential community services, people in direct contact during culling operations with poultry that is infected with avian influenza.

The protection against influenza strains in the vaccine is obtained within 2-3 weeks after immunization and lasts for 6-12 months.

6. **What are the situations in which LAIV should not be given?**

Contraindications to receiving LAIV include:

- children less than 2 years of age.
- those with a history of anaphylaxis to a previous dose or ingredients contained in the vaccine.
- history of Guillain-Barré Syndrome (GBS) within 6 weeks of a previous influenza immunization.
- those currently receiving aspirin therapy or aspirin-containing therapy.
- pregnant women.
- those with severe asthma who 1) are on oral or a high dose of inhaled therapy, 2) are actively wheezing, or 3) required a medical visit in the previous 7 days due to wheezing. LAIV can be used in those with stable non-severe asthma.
- those with reduced immunity due to illness and/or therapy. It can be used in children with chronic health conditions except those mentioned above.

Precautions when administering LAIV:

- those with serious acute febrile illness or nasal congestion should return when symptoms are settled.
- those who have had antiviral medication against influenza within 48 hours before the vaccine is due to be given. Patients should not receive antiviral medication for 2 weeks after the vaccine has been received.
- health care workers (HCW) or others providing care to or in close contact with persons with severely reduced immunity due to illness (eg. bone marrow transplant) and/or therapy should not receive LAIV due to risk of viral shedding after immunization. They may receive the inactivated influenza vaccine.

7. **What are the risks if influenza vaccine is not received?**

The risk of contracting influenza illness and of spreading it to others is increased when influenza vaccine is not received. Transmission of influenza illness contributes to increased morbidity and mortality in our communities, particularly to those who are more vulnerable.