

Population and Public Health Division

## Quadrivalent Live Attenuated Influenza Vaccine (Q-LAIV) (FluMist<sup>®</sup>): For individuals 2 through 17 years of age

*This fact sheet provides basic information only. It must not take the place of medical advice, diagnosis or treatment. Always talk to a health care professional about any health concerns you have, and before you make any changes to your diet, lifestyle or treatment.*

### 1. What is the quadrivalent live attenuated vaccine (Q-LAIV)?

Q-LAIV is a vaccine that is not given by injection but instead is sprayed into the nose to help protect against influenza infection. Q-LAIV is a quadrivalent influenza vaccine that protects against two influenza A viruses and two influenza B viruses.

Q-LAIV, which is sprayed into both nostrils, is the only needleless influenza vaccine available in Canada.

### 2. Can Q-LAIV give individuals influenza?

Unlike the injectable quadrivalent inactivated vaccine (QIV) which contains inactivated viruses, the Q-LAIV contains live attenuated (weakened) viruses. Just like the inactivated vaccine, the viruses in the Q-LAIV **do not cause influenza illness**. The live attenuated viruses are temperature sensitive, which means they are designed to only work at cooler temperatures found within the nose. The viruses cannot infect the lungs or other areas where warmer temperatures exist.

### 3. Can Q-LAIV be given while an individual is taking influenza antiviral medications?

If an individual is taking an influenza antiviral drug (e.g., Tamiflu<sup>®</sup> or Relenza<sup>®</sup>), then, Q-LAIV should not be given until 48 hours after the last dose of the antiviral medication that was taken.

If an individual takes antiviral drugs within two weeks of getting Q-LAIV, the individual should get revaccinated, because the antiviral drugs may prevent the vaccine from working. If using Q-LAIV for re-vaccination, 48 hours should pass from the last dose of antiviral medication before revaccination.

#### 4. Are there side effects from Q-LAIV?

Q-LAIV, like any medicine, can cause side effects, which in most cases are mild. The risk of the vaccine causing serious harm is extremely small. Side effects after receiving Q-LAIV include runny nose, nasal congestion, cough, chills, tiredness/weakness, sore throat and headache. These side effects are mild, lasting only a few days.

#### 5. Who should not get Q-LAIV?

The following individuals should not get Q-LAIV:

- Children younger than 2 years of age (due to increased risk of wheezing)
- People who have had a serious allergy (anaphylaxis) to a previous dose or to any ingredient in the vaccine, with the exception of egg\*
- People who have developed Guillain-Barré Syndrome (GBS) within six weeks of a previous influenza vaccination
- People with severe asthma
  - who are on high doses oral or inhaled steroids or who have active wheezing
  - who are medically treated for wheezing in the last 7 days prior to vaccination
- People with weakened immune system due to disease or medical treatment
- People who are on long-term aspirin or aspirin-containing therapy
- People taking a medication active against influenza (influenza antiviral medication) (see Question 3above)
- Pregnant women

**\*Please Note:** NACI indicates that egg allergic individuals may be vaccinated against influenza using the full dose of live attenuated influenza vaccine (LAIV).

#### 6. Can Q-LAIV be given to individuals when they are ill?

The influenza vaccine should be temporarily delayed in the following circumstances:

- Those with a severe acute illness with or without fever should usually wait until the symptoms subside before being immunized. However, people with a minor illness with or without a fever (e.g., a cold) can still get the vaccine.
- Those with significant nasal congestion that would impede the delivery of the vaccine should delay vaccination with Q-LAIV until the congestion is reduced. Alternatively, QIV can be received.

## **7. Can Q-LAIV be given to breastfeeding mothers?**

Breastfeeding mothers, upon consultation with their health care provider, may receive Q-LAIV as long as they don't have any contraindication to getting that vaccine, as noted above.

## **8. Can the Q-LAIV shed influenza virus, or transmit influenza to other people?**

Live vaccine viruses can be shed from the nose after Q-LAIV administration. Studies have shown that younger children are more likely to shed virus than older children. Younger children also shed higher numbers of virus than older children. Children may shed for an average duration of 7.6 days, with peak shedding around day 2-3 after vaccination; shedding is infrequent after day 11 post vaccination. It is rare for shed virus to spread to others and cause illness since shedding generally occurs at levels too low to cause an infection.

Serious illness has not been reported among unvaccinated persons infected with vaccine virus through close contact with a vaccinated person. However, as a precautionary measure, Q-LAIV recipients should avoid close contact with persons with severe immune compromising conditions (e.g., bone marrow transplant recipients requiring isolation in hospital) for at least two weeks following vaccination, because of the theoretical risk for transmitting a vaccine virus and causing infection.

## **9. Should personal protective equipment be used to administer Q-LAIV?**

The use of personal protective equipment such as gloves and masks are not needed to administer Q-LAIV. Using routine practices, as when administering any immunization, is adequate.

## **10. When should parents/guardians seek medical attention for their child after immunization with the Q-LAIV?**

Parents/guardians should be advised to call their doctor/nurse practitioner or go to the nearest hospital emergency department if any of the following symptoms develop within three days of getting the vaccine:

- Hives
- Swelling of the mouth and throat
- Trouble breathing, hoarseness or wheezing
- High fever (over 40°C or 104°F)
- Convulsions or seizures
- Other serious reactions to the vaccine

### **11. How can parents/guardians keep track of their child's influenza immunizations and other immunizations?**

After the child receives their vaccine, please write the immunization in their yellow immunization card.

If you do not have a yellow card, you can request one from your health care professional

### **12. Is the expiry date for Q-LAIV different from inactivated influenza vaccines?**

The shelf-life of Q-LAIV is considerably shorter than that of trivalent and quadrivalent inactivated influenza vaccines. Be sure to check the expiry date on the Q-LAIV as the vaccine lots received in Ontario will expire during the period of January through April 2017. Health care providers should optimize planning for use of the Q-LAIV to ensure that the product quantities allocated to your offices are used prior to the expiry date indicated on the product packaging.

### **13. Who can administer the Q-LAIV?**

The Q-LAIV will be available for ordering and administration by health care providers who administer the vaccine to children and adolescents 2 through 17 years of age. This includes physicians and nurse practitioners as well as registered nurses or registered practical nurses under a medical directive. Trained pharmacists can administer publicly funded Q-LAIV vaccines to individuals 5 years of age and older in accordance with Ontario's Universal Influenza Immunization Program (UIIP).

### **14. Can the Q-LAIV be purchased privately for those not eligible for the publicly funded Q-LAIV?**

Individuals not eligible to receive publicly funded Q-LAIV may still purchase them on the private market (e.g., at their local pharmacy) should they wish to do so.

### **15. Who should parents/guardians talk to if they have questions about influenza or any other vaccines?**

Individuals looking for general information about influenza, the influenza vaccine or the province's Universal Influenza Immunization Program can call: 1-877-844-1944 (TTY#1-800-387-5559) or visit: [www.ontario.ca/flu](http://www.ontario.ca/flu).

Questions about the vaccine that are specific to an individual's medical condition should be discussed with their health care provider or local public health unit. For a list of public health units, please visit: [www.health.gov.on.ca/en/common/system/services/phu/locations.aspx](http://www.health.gov.on.ca/en/common/system/services/phu/locations.aspx).

**For additional information on influenza or the vaccine, please visit the following websites or call your local public health unit:**

- a) Universal Influenza Immunization Program: [www.ontario.ca/flu](http://www.ontario.ca/flu)
- b) Public Health Agency of Canada site - National Advisory Committee on Immunization (NACI) Statement on Seasonal Influenza Vaccine: [www.phac-aspc.gc.ca/naci-ccni/#rec](http://www.phac-aspc.gc.ca/naci-ccni/#rec)
- c) *Immunize Canada*: [www.immunize.cpha.ca](http://www.immunize.cpha.ca)
- d) Centers for Disease Control and Prevention (CDC) - Seasonal Influenza: [www.cdc.gov/flu](http://www.cdc.gov/flu)

ServiceOntario, INFOline: 1-877-234-4343 toll free in Ontario (TTY: 1-800-387-5559)

Version française disponible en communiquant avec le 1 877 234-4343 ATS: 1 800 387-5559  
(web site: [www.health.gov.on.ca/fr/ccom/flu/](http://www.health.gov.on.ca/fr/ccom/flu/))