Quadrivalent Live Attenuated Influenza Vaccine (LAIV-Q)
FLUMIST® QUADRIVALENT Supplier: AstraZeneca Canada

INDICATIONS:

- See 2024/25 Seasonal Influenza Vaccine Eligibility
- **Intended for use in eligible individuals 2-17 years of age (inclusive).** [A]

The vaccine is not approved for use in those younger than 2 years or older than 59 years.

DOSES AND SCHEDULE:

Children 2-8 years of age (inclusive): 1 or 2 doses given as 0.2 mL (0.1 mL in each nostril) **intranasal spray**.

Children under 9 years of age who have not previously received any seasonal influenza vaccine require **2 doses** given 4 weeks apart. If the child has received 1 or more doses in any previous season, only a single dose is required. For children requiring 2 doses within the season, it is preferable to use the same vaccine for both doses. However, if the vaccine used for the first dose is not available or unknown, any other age-appropriate vaccine may be used for the second dose.

Children and Adolescents 9-17 years of age (inclusive): 1 dose given as 0.2 mL (0.1 mL in each nostril) **intranasal spray**.

Adults 18-59 years of age (inclusive): 1 dose given as 0.2 mL (0.1 mL in each nostril) **intranasal spray**; this product is approved for use in this age group but QIIV provides better protection against influenza. LAIV-Q is not routinely recommended for this age group.

ADMINISTRATION:

The shelf-life of LAIV-Q (approximately 4 months) is considerably shorter than that of inactivated influenza vaccines. Be sure to check the expiry date before administering this vaccine.

LAIV-Q IS AN INTRANASAL SPRAY AND IS NOT FOR INJECTION. DO NOT INJECT.

The product is provided in a 'sprayer' in a firm device that looks like a syringe with a tip protector at one end and a plunger with a dose divider clip at the other end. Details and a diagram on how to administer LAIV-Q are contained in the product monograph and the accompanying text is reproduced below:

1. Remove the rubber tip protector. Do not remove the dose-divider clip at the other end of the sprayer.
2. With the recipient sitting upright, place the tip of the sprayer just inside a nostril to ensure vaccine is delivered into the nose.
3. In one motion depress the plunger **as rapidly as possible** until the dose-divider clip prevents you from going further.

[A] This vaccine may be offered to those 18-59 years of age who have needle phobia and are unwilling to get another influenza vaccine, provided informed consent includes that QIIV provides better protection against influenza for this age group.

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ADMINISTRATION (continued):

4. Pinch and remove the dose divider clip from the plunger.
5. Place the tip of the sprayer just inside the **other nostril** and with a single motion depress the plunger **as rapidly as possible** to deliver the rest of the vaccine.

BOOSTER DOSES AND RE-IMMUNIZATION:

Annually.

SEROLOGICAL TESTING:

Serological testing is not recommended before or after immunization.

CONTRAINDICATIONS:

1. History of anaphylactic reaction to a previous dose of any type of influenza vaccine or to any component of LAIV-Q.
2. Severe asthma or active wheezing (on high dose inhaled or oral steroids or medically attended wheezing in the 7 days prior to vaccination).
3. Adults and children with immunocompromising conditions. [A]
4. HCWs working with immunocompromised individuals (See PRECAUTIONS 1st bullet).
5. Pregnancy.
6. Individuals 2-17 years of age receiving aspirin-containing therapy because of the association of Reye syndrome with aspirin and wild-type influenza infection. It is recommended that aspirin-containing products in children under 18 years of age be delayed for four weeks after receipt of LAIV-Q.
7. History of Guillain-Barré syndrome (GBS) within 8 weeks of receipt of a previous dose of influenza vaccine without another cause being identified.

PRODUCT COMPONENTS:

Potential allergens: ovalbumin, gelatin hydrolysate (porcine Type A), gentamicin, arginine hydrochloride.

Other components: sucrose, dibasic potassium phosphate, monobasic potassium phosphate, monosodium glutamate.

PRECAUTIONS:

- Vaccine recipients should be informed that LAIV-Q is a vaccine that contains a weakened strain of influenza virus and could potentially be transmitted to another person through contact with respiratory secretions. An infection with this weakened virus could cause a serious infection in a small category of patients who are severely immunocompromised and receiving care in hospital in a protected environment (e.g., post bone marrow transplant). Both health care workers and close contacts of such patients should avoid contact with these patients for two weeks after receiving LAIV-Q. If such contact cannot be avoided, offer an inactivated influenza vaccine instead of LAIV-Q.

[A] LAIV-Q may be considered for children 2-17 years of age with HIV infection and pediatric oncology clients, including autologous HSCT, who are ≥12 months post-treatment. Use Referral Form for Live Attenuated Influenza Vaccination.

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PRECAUTIONS (continued):

- Antiviral agents active against influenza (oseltamivir and zanamivir) interfere with the immune response to LAIV-Q. LAIV-Q should not be administered to individuals while taking these antiviral agents. Such individuals should receive inactivated influenza vaccine. If antiviral agents are administered from 48 hours before to 2 weeks after receipt of LAIV-Q, revaccinate when antiviral agents have been discontinued for at least 48 hours.

SPECIAL CONSIDERATIONS:

- Egg allergic individuals (including those who have experienced anaphylaxis following egg ingestion) can be immunized with inactivated or live attenuated influenza vaccine in any setting attended by immunization service providers who are following standard vaccine administration practice. [A]
- LAIV-Q can be given concomitantly with, or any time before or after any other live vaccine.
- LAIV-Q can be given concomitantly with, or any time before or after a TB skin test.
- LAIV-Q can be safely given to children and adolescents with cystic fibrosis unless they have contraindications (e.g., immunosuppressive therapy) for its use.

ADVERSE EVENTS [B]:

Local: runny nose or nasal congestion.
Systemic: decreased appetite, malaise, headache, fever, sore throat, cough, myalgia, chills, vomiting, abdominal pain, irritability.

[A] See Safety Issues Applicable to Influenza Vaccines, 1. Egg Allergic Individuals.
[B] These occur at similar frequencies among recipients of other influenza vaccines, are of short duration and rarely interfere with activities of daily living.