

# INFLUENZA

## WHO SHOULD RECEIVE THE VACCINE?

**All individuals 6 months of age and older, with a particular focus on:**

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

- All children 6 to 59 months of age
- Children and adolescents (age 6 months to 18 years) with the following conditions:
  - neurologic or neurodevelopment conditions (including seizure disorders, febrile seizures and isolated developmental delay)
  - undergoing treatment for long periods with acetylsalicylic acid, because of the potential increase of Reye's syndrome associated with influenza
- Adults (including pregnant women) and children with the following chronic health conditions:
  - cardiac or pulmonary disorders (including bronchopulmonary dysplasia, cystic fibrosis and asthma)
  - diabetes mellitus and other metabolic diseases
  - cancer, immune-compromising conditions (due to underlying disease and/or therapy)
  - renal disease
  - anemia or hemoglobinopathy
  - conditions that compromise the management of respiratory secretions and are associated with an increased risk of aspiration
  - morbid obesity (BMI $\geq$ 40)
- People of any age who are residents of nursing homes and other chronic care facilities
- People  $\geq$ 65 years of age
- Healthy pregnant women (the risk of influenza-related hospitalization increases with length of gestation, i.e. it is higher in the third than in the second trimester)
- Aboriginal Peoples

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

- Health care and other care providers in facilities and community settings who, through their activities, are capable of transmitting influenza to those at high risk of influenza complications
- Household contacts (adults and children) of individuals at high risk of influenza-related complications (whether or not the individual at high risk has been immunized):
  - household contacts of individuals at high risk, as listed in the section above
  - household contacts of infants <6 months of age, as these infants are at high risk of complications from influenza but cannot receive influenza vaccine; and
  - members of a household expecting a newborn during the influenza season
- Those providing regular child care to children  $\leq$ 59 months of age, whether in or out of the home
- Those who provide services within closed or relatively closed settings to persons at high risk (e.g. crew on a ship)

### Others

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

## WHO SHOULD NOT RECEIVE THE VACCINE?

- Persons who developed an anaphylactic response to a previous dose of influenza vaccine or to any of the vaccine components (with the exception of eggs) should not receive a further dose. Although avoiding subsequent influenza vaccination by persons known to have had Guillain-Barré Syndrome (GBS) within six weeks of a previous influenza vaccination appears prudent at this time, the potential risk of GBS recurrence associated with influenza vaccination should be balanced against the risk of GBS associated with influenza infection itself.

### LAIV SHOULD NOT BE ADMINISTERED TO:

- Children <24 months of age, due to increased risk of wheezing.
- Individuals with severe asthma (as defined as currently on oral or high-dose inhaled glucocorticosteroids or active wheezing) or those with medically attended wheezing in the 7 days prior to vaccination.
- Children and adolescents (2-17 years of age) currently receiving acetylsalicylic acid or acetylsalicylic acid-containing therapy, because of the association of Reye's syndrome with acetylsalicylic acid and wild-type influenza infection. It is recommended that acetylsalicylic acid-containing products in children <18 years of age be delayed for four weeks after receipt of FluMist® (LAIV).
- Pregnant women, because it is a live attenuated vaccine and there is a lack of safety data at this time. However, it is not contraindicated in nursing mothers.
- Persons with immune-compromising conditions, due to underlying disease, therapy or both, as the vaccine contains live attenuated virus.
- As a precaution, LAIV recipients should avoid close contact with persons with severe immune-compromising conditions (e.g. bone marrow transplant recipients requiring isolation) for at least 2 weeks following vaccination, because of the theoretical risk of transmitting a vaccine virus and causing infection.

Source: National Advisory Committee on Immunization (NACI). Statement on Seasonal Influenza Vaccine for 2015-2016. Available: <http://www.phac-aspc.gc.ca/naci-ccni/index-eng.php#rec>

# INFLUENZA

## CO-ADMINISTRATION

All influenza vaccines, including LAIV, may be given together or at any time before or after the administration of other live attenuated or inactivated vaccines. For concomitant parenteral injections, different injection sites and separate needles and syringes should be used.

## RECOMMENDED DOSAGE

Age group	TIV without adjuvant or QIV* (IM)	MF59-adjuvanted TIV (Fluad Pediatric™ or Fluad®) (IM)	LAIV (FluMist® Quadrivalent) (IN)	Number of doses required
6–23 months	0.5 mL*	0.25 mL	–	1 or 2**
2–8 years	0.5 mL	–	0.2 mL (0.1 mL per nostril)	1 or 2**
9–17 years	0.5 mL	–	0.2 mL (0.1 mL per nostril)	1
18–59 years	0.5 mL	–	0.2 mL (0.1 mL per nostril)	1
60–64 years	0.5 mL	–	–	1
≥65 years	0.5 mL	0.5 mL	–	1

**TIV** = Trivalent inactivated vaccine    **LAIV** = Live attenuated influenza vaccine    **IM** = Intramuscular  
**QIV** = Quadrivalent inactivated vaccine    **IN** = Intranasal

\* Influvac® ≥ 18 years, Fluviral® ≥ 6 months, Agriflu® ≥ 6 months, Vaxigrip® ≥ 6 months, FluZone® ≥ 6 months, Flulaval™ Tetra ≥ 6 months and Fluzone® Quadrivalent ≥ 6 months.

\*\* Children 6 months to less than 9 years of age who have never received the seasonal influenza vaccine require two doses of influenza vaccine, with a minimum interval of four weeks between doses. Eligible children < 9 years of age who have properly received one or more doses of seasonal influenza vaccine in the past should receive one dose per influenza vaccination season thereafter.

## CHOICE OF VACCINE PRODUCT

### Children 6 to 23 months

- QIV is recommended
- If QIV is not available, either unadjuvanted or adjuvanted TIV is recommended

### Healthy children 2 to 17 years

- LAIV is recommended for healthy children 2 to 17 years without contraindication
- If LAIV is not available, QIV is recommended
- If QIV is not available, TIV is recommended

### Children with immune-compromising conditions

- QIV is recommended
- If QIV is not available, TIV is recommended

### Children with severe asthma or medically attended wheezing in the previous seven days

- QIV is recommended
- If QIV is not available, TIV is recommended

### Children with other chronic health conditions

- LAIV or QIV are recommended
- If QIV is not available, TIV is recommended

### Healthy adults 18 to 59 years

- QIV, TIV or LAIV are recommended unless contraindicated

### Adults with chronic health conditions

- QIV or TIV are recommended

### Adults 60 to 64 years

- QIV or TIV are recommended with or without chronic health conditions

### Adults 65 and older

- QIV, TIV or MF59-adjuvanted TIV are recommended

### Pregnant women

- QIV or TIV are recommended

Source: National Advisory Committee on Immunization (NACI). Statement on Seasonal Influenza Vaccine for 2015-2016. Available: <http://www.phac-aspc.gc.ca/naci-ccni/index-eng.php#rec>