



BC Centre for Disease Control  
An agency of the Provincial Health Services Authority

*The following has been adapted from the Public Health Agency of Canada*

## **FluMist Messaging and Rationale**

Based on a review of available evidence, **FluMist nasal spray remains recommended, but is no longer preferentially recommended, for children 2-17 years of age.** In making its recommendation, Canada's National Advisory Committee on Immunization (NACI) considered several factors.

In the past, NACI recommended FluMist for children and adolescents 2 to 17 years of age, who do not have a medical reason that prevents them from receiving the influenza vaccine. This recommendation was based on evidence for its preferential use in young children (under 6 years of age).

In June 2016, the US Advisory Committee on Immunization Practices voted in favour of an interim recommendation against using FluMist for the 2016-2017 influenza season. This decision was based on data showing poor or relatively lower effectiveness of FluMist from 2013 through 2016.

In the summer of 2016, NACI reviewed the most current evidence on FluMist vaccine effectiveness and inactivated influenza vaccine (given by needle) effectiveness, including data from the US, UK, Finland, Canada and from the manufacturer. A recent Canadian study found that FluMist provided similar but not superior protection against influenza compared to influenza vaccines given by needle.

For the 2016-2017 flu season, in children without a medical reason that prevents them from receiving the influenza vaccine, a quadrivalent vaccine – one that protects against four strains of the flu virus – is recommended, either given by nasal spray, or by needle. If a quadrivalent vaccine is not available, a trivalent vaccine (one that protects against three strains of the flu virus) should be used.



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## Questions and Answers

### **Q1. What vaccine should be used for children for the 2016-2017 season if a quadrivalent vaccine is not available?**

If a quadrivalent formulation is not available, a trivalent vaccine – one that protects against three strains of the flu virus - should be used.

### **Q2. What proportion of Canada's influenza vaccine supply is LAIV (FluMist)? Will this decision affect the upcoming seasonal flu vaccine supply?**

FluMist represents less than 10% of the total number of influenza vaccine doses purchased this year by the provinces and territories. This recommendation is not expected to have a significant impact on vaccine supply.

### **Q3. How did NACI arrive at its decision?**

In making its recommendation, NACI considered several factors.

Although the US Flu Vaccine Effectiveness Network data showed little or no effectiveness from the LAIV (FluMist) vaccine in the past three seasons, other studies did demonstrate that the vaccine was effective. For example, studies conducted by the US Department of Defense, the United Kingdom, Finland, and the vaccine manufacturer estimated that LAIV (FluMist) was 46 to 58% effective in preventing influenza infection in children during the 2015-2016 flu season.

In Canada, although the study size was small, the data suggests that FluMist was effective against both the A and B type influenza viruses. This data also suggests that vaccine effectiveness against H1N1 influenza virus to be approximately 50%.

NACI will continue to monitor the LAIV (FluMist) vaccine effectiveness data closely and its relative effectiveness compared to other flu vaccines.

### **Q4. A recent Canadian study on the nasal spray flu vaccine found it was just as effective as the influenza vaccine given by needle. Did these results factor into NACI's decision?**

The study looked at a trivalent (three influenza strain) nasal spray flu vaccine and found it provided similar protection against influenza compared to the trivalent influenza vaccine given by needle. Although this unpublished study did not look specifically at FluMist quadrivalent, the major findings were presented to NACI and were one of the many studies considered in its recommendation on the use of nasal spray flu vaccine in children and adolescents. Canadian studies, such as this Canadian Institutes of Health Research-funded study, are important to provide continued Canadian-specific vaccine efficacy and effectiveness data to help inform Canadian influenza vaccination programs and



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recommendations.

### **Q5. Will provinces and territories still offer FluMist in their seasonal flu immunization campaigns?**

In Canada, immunization is a shared responsibility among the federal, provincial and territorial governments. The provinces and territories are responsible for delivering and funding immunization programs within their jurisdiction. As such, any policies and activities related to immunization fall within provincial / territorial jurisdiction.

Supplementary messages:

- Everyone over the age of six months, who can get the flu vaccine, should do so every year.
- It is especially important for those who are more likely to get seriously ill or suffer complications if they catch the flu. This includes:
  - All pregnant women
  - Children and adults with chronic medical conditions, such as cancer, cardiac disorders, asthma, and morbid obesity (people with a body mass index greater than 40);
  - Residents of nursing homes and other chronic care facilities;
  - People 65 years of age and older;
  - Healthy children 6 months to 5 years of age;
  - Aboriginal peoples;
- It is also important to vaccinate people capable of transmitting influenza to those at high risk, including
  - Health care and other care providers
  - Household contacts (adults and children) of individuals at high risk of influenza-related complications including infants less than 6 months of age
  - Those providing regular child care to children aged 59 months or younger, 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).
- The seasonal influenza vaccine is safe and effective and remains our best protection against influenza viruses. The best time to get your flu vaccine is early, between October and December, before the number of influenza cases increases in Canada.