Interlake-Eastern Regional Health Authority

2017 – 2018 Seasonal Influenza Program
Questions and Answers for Health Care Providers

For the 2017-18 influenza season, influenza vaccine is recommended and publically funded for all Manitobans ≥ 6 months of age. While all Manitobans are encouraged to be immunized, an annual flu shot is especially important for Manitobans at increased risk of serious illness from the flu, their caregivers and close contacts.

SEASONAL INFLUENZA VACCINE INFORMATION FOR IMMUNIZATION PROVIDERS

1. Q. What are the antigenic strains in the seasonal influenza vaccines?
A. The antigenic strains included in the 2016-2017 seasonal influenza vaccines are:

- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Hong Kong/4801/2014(H3N2)-like virus
- B/Brisbane/60/2008-like virus
- B/Phuket/3073/2013-like virus

2. Q. Which influenza vaccine should be offered to clients?
A. Vaccine Selection Recommendations - **assuming there are no contraindications**, use the table below to determine which influenza vaccine to offer clients.

Age	Flu Vaccine
6 months to 23 months	Inactivated influenza vaccine
24 months to 17 years	Inactivated influenza vaccine **OR** Live attenuated influenza vaccine
18+ years of age	Inactivated influenza vaccine

3. Q. What is the dosage and frequency of the seasonal influenza vaccines?
A. The dose and frequency indicated is dependent on the product and age of the individual.

- For quadrivalent inactivated influenza vaccine (QIIV), the dose is 0.5 mL for all age groups. This information is included in the QIIV product monograph. Manitoba has based its recommendations on the current National Advisory Committee on Immunization (NACI) statement. QIIV is administered **intramuscular (IM)**. The deltoid muscle is the recommended site in adults and children over 12 months of age. The anterolateral thigh is the recommended site in infants 6 -12 months of age.
- The live attenuated influenza vaccine (LAIV), indicated for 2 – 17 year olds, is administered via the **intranasal (ITN)** route. The dosage is 0.2 mL (0.1 mL in each nostril).
- Children 6 months to less than 9 years of age receiving seasonal influenza vaccine (either IM or ITN) for the first time should be given two doses, with a minimum interval of four weeks between doses.

4. Q. What flu vaccines are available in Manitoba?
A. The three products being used in Manitoba for the 2017-18 publicly funded influenza immunization program are FluZone® (Sanofi Pasteur), Flulaval® (GSK) and FluMist® (AstraZeneca).

Product/ Manufacturer	**FluZone® Sanofi Pasteur**	**Flulaval®** Tetra GSK	**Flumist® AstraZeneca**
Vaccine Preparation	QIV	QIV	LAIV
Vaccine Type	Inactivated- split virus	Inactivated- split virus	Live attenuated
Route of admin	IM	IM	Intranasal spray
Authorized age for use	≥ 6 months	≥ 6 months	2-17 years of age
Adjuvant	No	No	No
Format available	10 dose Multidose vial (MDV) or Pre-filled syringes (PFS)	10 dose Multidose vial (MDV)	pre-filled single-use glass sprayer
Post puncture shelf life for multi-dose	Up to expiry date indicated on vial label	28 days from puncture	N/A
Thimerosal	Yes – multidose vials only	Yes	No
Contains Latex	No	No	No
Okay in Pregnancy	Yes	Yes	No

5. Q. Can the influenza vaccine cause the flu?
A. The inactivated vaccine (QIIV) contains dead viruses and cannot cause influenza. The live attenuated vaccine (LAIV) contains weakened influenza viruses and may cause mild influenza symptoms but these are much milder than those due to influenza infection. Symptoms may include a runny nose, nasal congestion, cough, sore throat and fever.

6. Q. Who should NOT be given the quadrivalent inactivated influenza vaccine?
A. The following people should not receive seasonal influenza vaccine:

- Infants less than 6 months of age.
- People who have had a serious allergic reaction (anaphylaxis) to a previous dose of any influenza vaccine.
- People who have had a serious allergic reaction (anaphylaxis) to any of the components of influenza vaccine.
- People who have a serious acute febrile illness.
- People known to have had Guillain-Barré Syndrome within 6 weeks of a previous influenza vaccine.

7. Q. Who should NOT be given FluMist® influenza vaccine?*
A. The following people should not receive FluMist® vaccine:

- Children less than 2 years of age or adults over 59 years of age.
- Women who are pregnant or could become pregnant in the next month.
- Children with an immune system weakened by disease or medical treatment.
- History of severe allergic (anaphylactic) reaction to a previous dose of any type of influenza vaccine or any component of FluMist®.
- Those who have severe asthma or active wheezing in the last 7 days.
- Health care workers working with immunocompromised individuals.
- Those 17 years of age and younger who are on long term aspirin treatment in the last 4 weeks.
- Those with a history of Guillain Barré Syndrome (GBS) within 6 weeks of receipt of a previous dose of influenza vaccine without another cause being identified.

* ***Please also consult the Manitoba Health document "Live Attenuated Influenza Vaccine (FluMist®): Questions and Answers for Health Care Providers" – revised June 2017***

8. Q. Can someone who has a mild illness, like a head cold, still receive the flu vaccine?
A. Administration of the seasonal influenza vaccine should usually be postponed in persons with serious acute illnesses until their symptoms have abated. Immunization should not be delayed because of minor acute illness, with or without fever. If significant nasal congestion is present that might impede delivery of LAIV to the nasopharyngeal mucosa, inactivated vaccines can be administered or LAIV can be deferred until resolution of the illness.

9. Q. Can FluMist® be given to adults over 17 years of age?
A. As per NACI, LAIV can be used for the prevention of influenza in ***healthy*** adults up to 59 years of age provided they would otherwise decline immunization if only the needle option (QIV) were offered.

10. Q. Should people who are allergic to eggs receive the seasonal influenza vaccine?
A. NACI Statement 2017-18 states "egg allergic individuals without other contraindications to the vaccine may be vaccinated against influenza using inactivated QIV or LAIV without prior influenza vaccine skin test and with the full dose. The vaccine may be given in any setting where vaccines are routinely administered. The waiting period post immunization would be as recommended in the CIG". "Vaccine recipients should be kept under observation for at least 15 minutes when there is a specific concern about possible vaccine allergy; 30 minutes is a safer interval since the majority of cases of anaphylaxis will occur within 30 minutes following vaccine administration" (CIG).

11. Q. Should pregnant women receive the quadrivalent inactivated influenza vaccine?
A. Yes. NACI recommends the inclusion of all pregnant women, at any stage of pregnancy, among the specifically recommended recipients of inactivated influenza vaccine due to the risk of influenza-associated morbidity in pregnant women, evidence of adverse neonatal outcomes associated with maternal respiratory hospitalization or influenza during pregnancy(22-25), evidence that vaccination of pregnant women protects their newborns from influenza and influenza-related hospitalization(26-29) and evidence that infants born during influenza season to vaccinated women are less likely to be premature, small for gestational age, and low birth weight. The safety of inactivated influenza vaccine during pregnancy has been reviewed. Active studies of influenza vaccination during pregnancy have not shown evidence of harm to the mother or fetus associated with influenza immunization. Although the cumulative sample size of active studies of influenza vaccination in pregnant women is relatively small, particularly in the first trimester, passive surveillance has not raised any safety concerns despite widespread use of inactivated influenza vaccine in pregnancy over several decades (NACI statement 2017-2018).

12. Q. Can influenza vaccine be given to someone with a latex allergy?
A. Yes, all the vaccine products and the syringe and needle systems are latex-free.

13. Q. Can influenza vaccine and pneumococcal vaccine be given at the same time?
A. Yes they can be administered at the same time but with separate needles and syringes in different sites.

14. Q. What are the side effects of the influenza vaccine?
A. For the flu shot, it is common to have soreness, redness and swelling at the injection site for up to two days. Some people may have sore muscles, fatigue, and headache, and children may be irritable. These common side effects may occur within the first two days after vaccination.
For FluMist®, common reactions may include a runny nose, nasal congestion, cough, and sore throat. Some children may also have a headache, decreased appetite or weakness. These are mild reactions and usually last one to two days. A non-aspirin pain reliever like Tylenol® can reduce fever or soreness.

15. Q. Is quadrivalent inactivated influenza vaccine safe for breastfeeding mothers?
A. Yes. The QIIV is safe for breastfeeding mothers and their babies (via breast milk).

16. Q. Are there any special considerations for individuals on warfarin or theophylline?
A. Although influenza vaccine can inhibit the clearance of warfarin and theophylline, clinical studies have not shown any adverse effects attributable to these drugs in people receiving influenza vaccine.

17. Q. Can you receive QIIV or LAIV before or after having donated/received blood or Immune Globulin?
A. Yes.

18. Q. Can I draw up the seasonal influenza vaccine into syringes to be used at a later time?
A. No. The manufacturer has no data to confirm that immunogenicity of the product will be preserved after prolonged exposure to the plastic of the syringe. The influenza vaccine should be injected as soon as possible after being drawn up.

19. Q. How long can a vial of influenza vaccine be used once it is opened?
A. A multidose vial of Fluzone® which has been entered may be used to the expiry date indicated on the vial label. A multidose vial of Flulaval® Tetra should be used within 28 days from puncture.

20. Q. How should influenza vaccines be stored?
A. Vaccine Cold Chain should be maintained at all times (2°C to 8°C). The vaccine should not be frozen and must be protected from light.

21. Q. How soon following immunization does protection develop and how long does it last?
A. Protection from the influenza vaccine generally begins 10 to 14 days after immunization and may last 6 months or longer.

22. Q. Do adverse events need to be reported to Manitoba Health?
A. Yes, All adverse events not normally expected, that may be related to the administration of the vaccine, need to be reported. The “Adverse Events following Immunization” (AEFI) form should be used – found at http://www.gov.mb.ca/health/publichealth/cdc/docs/aefi_form.pdf .

REFERENCES: *NACI Statement on Seasonal Influenza Vaccine for 2017-2018; Government of Manitoba – Public Health Branch – Influenza Fact Sheets 2017, Vaccine Product Monographs.*