A. Universal Influenza Immunization Program

1. What is the Universal Influenza Immunization Program (UIIP)?

Ontario’s Universal Influenza Immunization Program (UIIP) offers influenza vaccine free of charge each year to all individuals six months of age and older who live, work or go to school in Ontario.

2. Where and how can Ontarians access publicly funded influenza vaccine?

The influenza vaccine is available at no cost to the public through primary care providers, public health units, pharmacies (for those 5 years of age and older), and in various other settings such as long-term care homes, workplaces, hospitals and community health centres. Vaccine product availability may vary. During the influenza season, Ontarians can contact their local public health unit if they require assistance locating a health care provider that offers the influenza vaccine.

Individuals may be required to provide proof that they live, work or attend school in Ontario to receive the vaccine. Many different identification (ID) documents are accepted to prove eligibility (e.g., health card, registered mail, pay stub, student card).

B. Influenza

3. How many people typically become infected with influenza every year?

An average of 23,000 laboratory-confirmed cases of influenza are reported each year in Canada to the FluWatch program, Canada’s national surveillance system that monitors the spread of influenza and influenza-like illnesses. It is important to note that there are many more people infected with influenza, but most people with influenza do not seek health care
and/or do not have a specimen taken, so are not included in the case counts for those with laboratory-confirmed influenza.

4. **How many people in Ontario are hospitalized or die of influenza every year?**

Influenza and pneumonia are ranked among the top 10 leading causes of death among the Canadian population. According to Canada’s National Advisory Committee on Immunization (NACI), 12,200 influenza related hospitalizations occur on average in Canada each year. The actual numbers can vary from year to year depending on the severity of the influenza season. Since Ontario represents 39% of the Canadian population and assuming that influenza-related hospitalizations are distributed evenly across the country, it is estimated that there would be an average of approximately 4,750 influenza-associated hospitalizations per year in Ontario.

According to NACI, there are approximately 3,500 deaths related to influenza on average each year in Canada. Again, as Ontario represents 39% of the Canadian population, it is estimated that there would be an average of approximately 1,365 influenza-associated deaths per year in Ontario. The highest mortality rate typically occurs among adults 65 years of age and older.

5. **Who is most at risk from complications due to influenza?**

Influenza vaccine is available for everyone 6 months of age and over without contraindications. Individuals in the following groups are at highest risk for complications from influenza infection or are most likely to spread influenza to those at highest risk and therefore are particularly recommended to receive the influenza vaccine:

- **Individuals at high risk of influenza-related complications or more likely to require hospitalization:**
  - All pregnant women
  - People who are residents of nursing homes or other chronic care facilities
  - People ≥65 years of age
  - All children 6-59 months of age
  - Indigenous peoples
  - Adults or children with chronic health conditions as follows:
    - cardiac or pulmonary disorders
    - diabetes mellitus or other metabolic disease
    - cancer
    - conditions which compromise the immune system
    - renal disease
    - anemia or hemoglobinopathy
    - neurologic or neurodevelopmental conditions
    - morbid obesity (body mass index of ≥40)
    - children and adolescents (6 months to 18 years) undergoing treatment with acetylsalicylic acid for long periods

- **Individuals capable of transmitting influenza to those at high risk:**
  - Health care workers and other care providers in facilities and community settings
  - Household contacts (adults and children) of individuals at high risk of influenza related complications
- Persons who provide care to children ≤59 months of age
- Those who provide services within a closed or relatively closed setting to persons at high risk (e.g., crew on a ship)
- In addition, the ministry strongly recommends that swine and poultry industry workers receive influenza immunization as early as possible.

**C. 2018/2019 Universal Influenza Immunization Program**

6. Which influenza vaccines will be publicly funded in 2018/2019?

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Quadrivalent Inactivated Vaccines (QIVs)</th>
<th>Quadrivalent - Live Attenuated Influenza Vaccine (Q-LAIV)</th>
<th>High-Dose Trivalent Inactivated Vaccine (High-Dose TIV)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FluLaval® Tetra</td>
<td>Fluzone® Quadrivalent</td>
<td>Fluzone®</td>
</tr>
<tr>
<td><strong>Dosage</strong></td>
<td>0.5 mL</td>
<td>0.5 mL (0.1mL in each nostril)</td>
<td>0.5 mL</td>
</tr>
<tr>
<td><strong>Format(s)</strong></td>
<td>Multi-dose vial</td>
<td>Multi-dose vial (MDV) Prafill filled syringe (PFS)</td>
<td>Prefilled syringe</td>
</tr>
<tr>
<td><strong>Administration Route</strong></td>
<td>Intramuscular injection</td>
<td>Intramuscular injection</td>
<td>Intranasal spray</td>
</tr>
<tr>
<td><strong>Age Indications as per product monograph</strong> (UIIP eligibility table 2)</td>
<td>≥6 months</td>
<td>≥6 months</td>
<td>≥65 years</td>
</tr>
<tr>
<td><strong>Most Common Allergens</strong></td>
<td>• Egg Protein*</td>
<td>• Egg Protein*</td>
<td>• Egg Protein*</td>
</tr>
<tr>
<td></td>
<td>• Thimerosal</td>
<td>• Thimerosal</td>
<td>• Arginine</td>
</tr>
<tr>
<td></td>
<td>MDV:</td>
<td>PFS:</td>
<td>• Egg Protein*</td>
</tr>
<tr>
<td></td>
<td>• Egg Protein*</td>
<td>• Egg Protein*</td>
<td>• Egg Protein*</td>
</tr>
<tr>
<td></td>
<td>• Gelatin</td>
<td>• Gentamicin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Arginine</td>
<td>• Gentamicin</td>
<td></td>
</tr>
<tr>
<td><strong>Post-Puncture Shelf Life</strong></td>
<td>28 days</td>
<td>MDV:</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>MDV:</td>
<td>PFS:</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>28 days</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Package Dimensions in cm</strong></td>
<td>3 x 3 x 6</td>
<td>MDV:</td>
<td>10.4 x 8.9 x 2.9</td>
</tr>
<tr>
<td></td>
<td>MDV:</td>
<td>PFS:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.6 x 2.9 x 6</td>
<td>10.6 x 17.6 x 2.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.4 x 8.9 x 3.8</td>
<td>10.4 x 8.9 x 2.3</td>
<td></td>
</tr>
</tbody>
</table>

*According to the National Advisory Committee on Immunization (NACI), egg-allergic individuals may be vaccinated against influenza using the full dose of any appropriate product, including QIV, Q-LAIV and high-dose TIV.*
Important Notes:

- Fluzone® Quadrivalent and Fluzone® High-Dose are different products. Fluzone® High-Dose is only authorized for those 65 years of age and over. Please use caution when administering Fluzone® products to ensure that the right vaccine is being administered to the right person.

- Fluzone® High-Dose will be available through primary care providers (e.g. physicians and nurse practitioners), participating retirement homes, long-term care homes and hospitals. Fluzone® High-Dose will not be available through pharmacies.

- Publicly funded influenza vaccines must be administered by a regulated health professional who is authorized to administer vaccines or by an individual under a delegation from an authorized regulated health professional.

- Publicly funded vaccine must not be administered to individuals who do not meet the eligibility criteria for the UIIP or to individuals with contraindications to the vaccine.

- Trained pharmacists may only administer publicly funded influenza vaccine to individuals 5 years of age and older.

7. Which vaccines are individuals eligible to receive?

<table>
<thead>
<tr>
<th>Age Group</th>
<th>QIV</th>
<th>Q-LAIV</th>
<th>High-Dose TIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 to 23 months</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 to 17 years</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>18 to 64 years</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>≥65 years</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Note: NACI has not identified any preference between Q-LAIV and QIV products.

8. Which vaccine works better in individuals ≥65 years of age?

Please refer to question 3 in the Health Care Provider Q&A: Information for individuals ≥65 years of age fact sheet.

9. What are the recommended needle gauge and lengths for intramuscular injections?

<table>
<thead>
<tr>
<th>Vaccine Recipient</th>
<th>Infants, Toddlers and Older children</th>
<th>Adolescents and Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended needle gauge</td>
<td>22-25</td>
<td>22-25</td>
</tr>
<tr>
<td>Recommended needle length</td>
<td>⅞ - 1 inch</td>
<td>1 - 1½ inch</td>
</tr>
</tbody>
</table>
10. Which strains of influenza are covered by the 2018/2019 influenza vaccines?

For the northern hemisphere’s 2018/2019 season, the World Health Organization (WHO) has recommended the following strains be included in the:

Quadrivalent vaccine:
- A/Michigan/45/2015 (H1N1)pdm09-like virus;
- A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus;
- B/Colorado/06/2017-like virus (B/Victoria/2/87 lineage); and
- B/Phuket/3073/2013-like virus (B/Yamagata/16/88 lineage).

Trivalent vaccines:
- A/Michigan/45/2015 (H1N1)pdm09-like virus;
- A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus; and
- B/Colorado/06/2017-like virus (B/Victoria/2/87 lineage).

D. Influenza Vaccine

11. How well does the influenza vaccine protect against influenza?

Influenza viruses change constantly (called antigenic drift) – they can change from one season to the next or they can even change within the course of one influenza season. The influenza vaccine is made to protect against the influenza viruses that surveillance and research indicate will likely be most common during the season as recommended by the World Health Organization.

Protection from the influenza vaccine varies from year to year depending on how well the strains included in the vaccine match the circulating strains. Influenza immunization has been shown to reduce the number of physician visits, hospitalizations and deaths in high risk adults. Although a less than ideal match may result in reduced vaccine effectiveness, the vaccine can still provide some protection against circulating influenza viruses.

It takes about two weeks following immunization to develop protection against influenza. As protection wanes over time and virus strains change frequently, it is important to be immunized each season. The vaccine will not protect against colds and other respiratory illnesses that may be mistaken for influenza.

12. Do individuals need to receive the influenza vaccine every year?

Expert advisory groups recommend that the influenza vaccine be administered annually because influenza viruses change often and immunity wanes between influenza seasons.

13. When should the influenza vaccine be given?

Influenza vaccine should be offered as soon as it becomes available at doctors’ offices, participating pharmacies and at local public health units. It is recommended that people
receive the influenza vaccine prior to the onset of the influenza season if possible, such as in October or early November. Community-based influenza immunization clinics generally begin when the UIIP is officially launched in mid to late October. Although vaccination is recommended before influenza begins to circulate, for those who miss early vaccination, the vaccine can be offered as long as influenza is still circulating in the community.

14. Can the influenza vaccine be given at the same time as other vaccines?

The influenza vaccine may be given at the same time as other vaccines or at any time before or after other vaccines. If given by injection at the same time as other vaccines given by injection, separate limbs should be used. Alternatively, the injections may be administered into the same muscle separated by at least 2.5 cm (1”). Different administration sets (needle and syringe) must be used for each vaccine given by injection.

15. Are the influenza vaccines safe?

The influenza vaccines are safe and well tolerated and have undergone the same testing as other vaccines approved for use in Canada.

16. What are the risks from the influenza vaccine?

The influenza vaccine, like any medicine, can cause side effects, which in most cases are mild, lasting only a few days. Life-threatening allergic (anaphylactic) reactions are very rare. If they do occur, it is typically within a few minutes to a few hours after receiving the vaccine. If this type of reaction occurs, medical attention should be sought immediately. For details on common side effects from the influenza vaccines, as well as serious reactions requiring medical attention, please refer to the age specific Health Care Provider Q & A fact sheets.

The risk of the vaccine causing serious harm is extremely small and can include serious allergic reactions and the following:

**Guillain-Barré Syndrome (or GBS)**

GBS is a very uncommon disease that causes muscle paralysis and has been associated with certain infectious diseases (e.g., *Campylobacter*, a bacteria that causes diarrhea). Overall, the risk of GBS occurring in association with influenza immunization is very small. In comparison to the very small risk of GBS, the risk of illness and death associated with influenza is much greater. In addition, influenza illness itself can cause GBS, and the risk of GBS from influenza illness appears to be greater than the risk from the vaccine. Individuals who have developed GBS within 6 weeks of an influenza vaccination, should avoid subsequent influenza vaccinations.

**Oculorespiratory Syndrome (ORS)**

In Canada, during the 2000-2001 influenza season, ORS was reported after administration of the influenza vaccine in some individuals. Symptoms include redness in both eyes that are not itchy, and/or swelling of the face, and/or respiratory symptoms occurring within 24 hours of influenza immunization. Since the 2000-2001 influenza season, few cases of ORS have been reported.
Individuals who experienced ORS symptoms in the past may be safely re-immunized with influenza vaccine except for those who have experienced ORS with severe lower respiratory symptoms (wheeze, chest tightness, difficulty breathing) within 24 hours of influenza immunization. These individuals should seek expert medical advice before being immunized again with influenza vaccine.

Health care providers (i.e., physicians, nurses and pharmacists) are required by law (i.e., Health Protection and Promotion Act, s. 38) to report adverse events following immunization (AEFI). Reports should be made using the Ontario AEFI Reporting Form (available at: www.publichealthontario.ca/en/BrowseByTopic/InfectiousDiseases/Pages/Vaccine-Safety.aspx) and sent to the local public health unit (available at: www.health.gov.on.ca/en/common/system/services/phu/locations.aspx).

E. Influenza Vaccine Ordering and Distribution

Please visit the ministry website at www.ontario.ca/influenza for details on ordering publicly funded influenza vaccine.

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

a. Ontario’s Universal Influenza Immunization Program: www.ontario.ca/influenza
c. Immunize Canada: www.immunize.ca
d. Centers for Disease Control and Prevention (CDC): Seasonal Influenza: www.cdc.gov/flu
e. ServiceOntario, INFOline: 1-866-532-3161 toll free in Ontario (TTY: 1-800-387-5559)

For a list of public health unit locations, please visit: http://www.health.gov.on.ca/en/common/system/services/phu/locations.aspx

Version française disponible en communiquant avec le 1 866 532-3161 ATS: 1 800 387-5559
(web site: www.health.gov.on.ca/fr/ccom/flu/)

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