A. Universal Influenza Immunization Program

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

Ontario’s Universal Influenza Immunization Program (UIIP), introduced in 2000, offers influenza vaccine free of charge each year to all persons six months of age and older who live, work or go to school in Ontario.

2. Why Does Ontario offer a UIIP?

The first program of its kind in the world, the UIIP aims to:

- Provide individual protection against influenza;
- Reduce the number and severity of influenza cases;
- Reduce the impact on the health care system during the influenza season; and
- Decrease the overall economic impact in both direct health care costs and indirect societal costs.

Since the introduction of the UIIP in Ontario, other jurisdictions have adopted universal influenza immunization programs including many Canadian provinces and territories and the United States.
3. Where and how can Ontarians access publicly funded influenza vaccine?

The influenza vaccine is available at no cost to the public through their primary care provider, public health unit clinics, pharmacies, and in various other settings such as long-term care homes, workplaces, hospitals and community health centres. During the influenza season, Ontarians can visit http://www.ontario.ca/flu and use the Flu Vaccine Locator Tool to find an influenza immunization clinic nearby.

People 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. If the influenza vaccine is being administered at a doctor’s office or pharmacy, a valid Ontario Health Card must be provided.

B. Influenza

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

Each year up to 7 million Canadians are infected with influenza. According to National Advisory Committee on Immunization (NACI), an average of 23,000 laboratory-confirmed cases of influenza are reported to the FluWatch program each year.

Rates of infection are highest in children aged five to nine years, but rates of serious illness and death are highest in children under two years of age, older persons (65 years of age and older), and people with underlying medical conditions.

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

Influenza is ranked among the top 10 leading causes of death among the Canadian population. According to NACI, 12,200 hospitalizations related to influenza occur on average each year in Canada. 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.
6. Who is most at risk from complications from influenza?

Individuals in the following high risk criteria (unless contraindicated) are strongly encouraged to receive the influenza vaccine.

- Individuals at high risk of influenza-related complications or more likely to require hospitalization:
  - Young children under five years of age (especially those younger than two years of age);
  - Children and adolescents (age 6 months to 18 years) undergoing treatment with acetylsalicylic acid for long periods;
  - Adults 65 years of age and older;
  - Individuals with neurologic or neurodevelopment conditions
  - Individuals of any age who are residents in long-term care home (LTCH) or other chronic care facilities;
  - Individuals with underlying health conditions (e.g., cardiac/pulmonary disorders, renal disease, morbid obesity, diabetes and cancer or weakened immune systems);
  - Pregnant women; and
  - Indigenous Peoples.

- Individuals capable of transmitting influenza to those at high risk:
  - Health care workers 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 of those at high risk; and
  - Persons who provide care to children under five years of age.

- In addition, the ministry strongly recommends that swine and poultry industry workers receive influenza immunization as early as possible.
7. Is it true that getting the influenza vaccine every year might result in less protection than in those who have not been vaccinated?

Recent studies have suggested that those who receive influenza vaccination every year may have a lower response to the influenza vaccine than those who have not been previously or recently vaccinated. However, these studies indicate that in any year, you get better protection by being vaccinated than by not receiving the vaccine. All expert advisory groups continue to recommend annual influenza vaccine for those eligible for publicly funded vaccine. Further studies are needed to understand the effect of repeat influenza vaccinations.

C. 2016/2017 Universal Influenza Immunization Program

8. Which influenza vaccines will be publicly funded in 2016/2017?

For the 2016/2017 UIIP, Ontario will be offering the following influenza vaccines:

<table>
<thead>
<tr>
<th>Influenza Vaccine Formulation</th>
<th>Agriflu® / Fluviral®</th>
<th>Influvac®</th>
<th>Fluad®</th>
<th>Flulaval Tetra® / Fluzone® Quadrivalent</th>
<th>Flumist® Quadrivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Influenza Vaccine Formulation</strong></td>
<td>Trivalent inactivated vaccine (TIV)</td>
<td>Trivalent inactivated vaccine (TIV)</td>
<td>Trivalent inactivated vaccine (adjuvanted) (TIV-adjuvanted)</td>
<td>Quadrivalent inactivated vaccine (QIV)</td>
<td>Quadrivalent live attenuated vaccine (Q-LAIV)</td>
</tr>
<tr>
<td><strong>Dosage</strong></td>
<td>0.5mL</td>
<td>0.5mL</td>
<td>0.5mL</td>
<td>0.5mL</td>
<td>0.2mL (0.1mL in each nostril)</td>
</tr>
<tr>
<td><strong>Route of Administration</strong></td>
<td>Intramuscular Injection</td>
<td>Intramuscular Injection</td>
<td>Intramuscular Injection</td>
<td>Intramuscular Injection</td>
<td>Intranasal spray</td>
</tr>
<tr>
<td>Age Indication</td>
<td>Agriflu® / Fluviral®</td>
<td>Influvac®</td>
<td>Fluad®</td>
<td>FluLaval Tetra® / Fluzone® Quadrivalent</td>
<td>Flumist® Quadrivalent</td>
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</tr>
<tr>
<td>(see “Vaccines for Specific Age Groups” below for eligibility)</td>
<td>6 months and older*</td>
<td>18 years</td>
<td>65 years and older who reside in long-term care homes</td>
<td>6 months through 17 years</td>
<td>2 through 17 years**</td>
</tr>
<tr>
<td>Potential Allergens</td>
<td>Agriflu:</td>
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<td></td>
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<tr>
<td></td>
<td>Egg protein^</td>
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<tr>
<td></td>
<td>Kanamycin</td>
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<td></td>
<td>Neomycin</td>
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<tr>
<td></td>
<td>Thimerosal</td>
<td></td>
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<tr>
<td></td>
<td>Fluviral:</td>
<td></td>
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<tr>
<td></td>
<td>Egg protein^</td>
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<tr>
<td></td>
<td>Chicken protein</td>
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<tr>
<td></td>
<td>Gentamicin</td>
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<tr>
<td></td>
<td>Fluviral:</td>
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</tr>
<tr>
<td></td>
<td>Egg protein^</td>
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<tr>
<td></td>
<td>Thimerosal</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Package Description</td>
<td>Multi-dose vial</td>
<td>Single dose syringe</td>
<td>Single dose syringe</td>
<td>Multi-dose vial±</td>
<td>Single dose sprayer</td>
</tr>
<tr>
<td>Once punctured, discard vial after</td>
<td>28 days</td>
<td>n/a</td>
<td>n/a</td>
<td>FluLaval:</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fluzone: expiry date indicated on vial</td>
<td></td>
</tr>
<tr>
<td>Package Dimensions (length x width x height)</td>
<td>3cm x 3cm x 7cm</td>
<td>18.8cm x 15.2cm x 1.7cm</td>
<td>10.8cm x 10.2cm x 4.4cm</td>
<td>3cm x 3cm x 6cm</td>
<td>10.6cm x 17.6cm x 2.9cm</td>
</tr>
</tbody>
</table>
Unless specifically requested the TIVs are primarily targeted to adults 18 years of age and older.

** NACI has removed the preferential recommendation for the use of Q-LAIV in children 2 to under 6 years of age.

^ NACI has concluded that egg allergic individuals may be vaccinated against influenza using live attenuated influenza vaccine (see ADDENDUM – LAIV Use in Egg Allergic Individuals-Canadian Immunization Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2016-2017.

± Nominal supply of thimerosal free, single-dose prefilled syringe of Fluzone® Quadrivalent vaccine is available for children aged 6 months to 17 years that have known thimerosal allergies.

Important Notes:

- Publicly funded influenza vaccines must be administered by a regulated health care professional.

- Publicly funded vaccine must not be administered to individuals outside the eligibility criteria 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.

- Following the recommendation by the US Advisory Committee on Immunization Practices (ACIP), the US Centres for Disease Control and Prevention (CDC) has announced that the nasal spray flu vaccine (live attenuated influenza vaccine or LAIV) should not be used in the United States during 2016-2017 influenza season. This recommendation against live attenuated influenza vaccine (LAIV) use for the 2016/2017 influenza season was based on US data showing poor or relatively lower effectiveness of LAIV from 2013 through 2016.

- Other studies did demonstrate that the vaccine was effective. As well, in Canada, although the study size was small, the data suggests that Q-LAIV 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%. Based on this review of the most current evidence, Q-LAIV remains recommended by NACI, but is no longer preferentially recommended for children 2 to under 6 years of age.

- 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 the Q-LAIV or QIV vaccine.

Vaccines for Specific Age Groups:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Recommended Vaccine</th>
<th>Alternative Vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 through 23 months</td>
<td>QIV</td>
<td>TiV§ (if requested or if QIV is not available)</td>
</tr>
<tr>
<td>2 through 17 years</td>
<td>QIV or Q-LAIV</td>
<td>TiV§ (if requested or if QIV or Q-LAIV is not available)</td>
</tr>
<tr>
<td>18 years and older</td>
<td>TiV</td>
<td>None</td>
</tr>
<tr>
<td>65 years and older who reside in long-term care homes (LTCHs)</td>
<td>TiV-adjuvanted</td>
<td>TiV (if requested or if TiV-adjuvanted is not available)</td>
</tr>
</tbody>
</table>

§ Only Agriflu® and Fluviral® can be used to immunize individuals under 18 years of age. With the exception of individuals who are 65 years and older who reside in LTCHs (in which case, the last row applies).

9. Which strains of influenza are covered by the 2016/2017 influenza vaccines?

For the Northern Hemisphere's 2016/2017 season, the WHO has recommended the following strains be included in the vaccine that contains three strains (trivalent vaccine):

- A/California/7/2009 (H1N1)pdm09-like virus;
- A/Hong Kong/4801/2014 (H3N2)-like virus;
- B/Brisbane/60/2008-like virus.

The influenza vaccines that protect against four strains of influenza (quadrivalent vaccines) contain all three influenza strains listed above plus a second influenza B strain, the B/Phuket/3073/2013-like virus.

10. Is this season's vaccine a good match for influenza viruses?

Influenza vaccine effectiveness can vary from year to year and it's not yet possible to predict with certainty if this year's vaccine will be a good match for circulating viruses. The vaccine is made to protect against the flu viruses that research indicates will likely be most common during the season. Influenza viruses change constantly (called drift) – they can change from one season to the next or they can even change within the course of one flu season.

In seasons when most circulating influenza viruses are similar to the viruses in the vaccine, the vaccine can reduce the risk of illness caused by influenza infection by 50% to 60% among the overall population.
11. 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

b) Public Health Agency of Canada site: National Advisory Committee on Immunization (NACI) Statement on Seasonal Influenza Vaccine: www.phac-aspc.gc.ca/naci-ccni/#rec

c) Immunize Canada: www.immunize.cpha.ca

d) Centers for Disease Control and Prevention (CDC): Seasonal Influenza: www.cdc.gov/flu

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

ServiceOntario, INFOline: 1-877-234-4343 toll free in Ontario (TTY: 1-800-387-5559)

Version française disponible en communiquant avec le 1 877 234-4343 ATS: 1 800 387-5559 (web site: www.health.gov.on.ca/fr/ccom/flu/)