

Let's Get FLULESS



With the influenza season upon us, it is important to keep in mind that to ensure optimal protection against influenza, the vaccine should be administered as soon as possible, ideally between now and the end of December to provide protection before the virus circulates widely. For the 2015-16 influenza season as outlined on the insert on page 2, the Ministry of Health and Long-Term Care has added two new vaccines providing more coverage against influenza for children and youth between from 6 months to 18 years of age. The addition of these new vaccines creates more complexity

however for health care providers in ensuring the right vaccine is given for the recommended target groups. This edition of Public Health Notes provides some highlights about new influenza vaccines and influenza prevention and control. I hope you find the content useful in your practice.

Sincerely,

Maureen Carew M.D, MSc, FRCPC
Medical Officer of Health and Chief Executive Officer

The Flu has gone VIRAL

This issue of Public Health Notes focuses on influenza prevention and control and is available on the Renfrew County and District Health Unit website at www.rcdhu.com. Seasonal influenza is a contagious respiratory illness caused by the influenza virus. It is easily acquired and spread via respiratory droplets when an infected person coughs or sneezes, touches contaminated surfaces and then touches their eyes nose and/or mouth. Influenza typically starts with a headache, chills and cough, followed rapidly by fever, loss of appetite, muscle aches and fatigue, runny nose, sneezing, watery eyes and throat irritation. Nausea, vomiting and diarrhea may also occur, especially in young children.

Influenza lowers the body's defense mechanisms which can lead to influenza-associated complications such as pneumonia and bronchitis. In addition, influenza can worsen an underlying medical condition such as diabetes, respiratory illnesses, cardiac disease, renal disease and cancer.

Depending on the severity of the influenza season, approximately 4,750 influenza-associated hospitalizations and 1,365 influenza-associated deaths occur annually in Ontario. Children under two years of age, adults 65 years of age and older and individuals with underlying medical conditions have the highest morbidity and mortality rates.

Influenza vaccination is the best protection against influenza in combination with maintaining a healthy lifestyle and practicing good hand hygiene and respiratory etiquette.

References

Canadian Immunization Guide. Evergreen edition (2015). <http://www.phac-aspc.gc.ca/publicat/cig-gci/index-eng.php>
Ministry of Health and Long-Term Care. (2015). *Universal Influenza Immunization Program Q & A for Public Health Units.*



Renfrew County and District Health Unit

Inside this issue.....

FluMist® Live Attenuated Influenza Vaccine	2
Provide A Record!	2
Egg Allergy	2
7 Ways to avoid becoming infected with the influenza virus	3
Importance of the "Cold Chain"	3
Nasopharyngeal Specimen Collection for influenza like illness	4
Summary of the 2014/2015 Influenza season for RCDHU	4

INSERTS

- ◆ What's New for the 2015/16 Universal Influenza Immunization Program
- ◆ Influenza Vaccine Supply
- ◆ Antiviral Treatment and Prophylaxis during a Public Health-Confirmed Influenza Outbreak in Long-Term Care
- ◆ Infection Prevention and Control for Influenza Like Illness (ILI)

Flumist® Live Attenuated Influenza Vaccine

FluMist® Quadrivalent is a Live Attenuated Influenza Vaccine (LAIV) for intranasal administration and is publicly funded this influenza season! FluMist® is recommended by the National Advisory Committee on Immunization as an effective way to prevent influenza for healthy children two to seventeen years of age (2-17), preferential use is in children two to six years of age. It protects against the following strains of influenza: *A/Switzerland/9715293/2013(H3N2)*; *A/California/7/2009 (H1N1)pdm09*; *B/Phuket/3073/2013 (Yamagata lineage)*; and *B/Brisbane/60/2008 (Victoria lineage)*.

Children nine years of age and older, as well as any child two to eight years of age, who previously received an influenza vaccine, only require **one dose** of FluMist® per season. Children two to eight years of age who have not received any prior influenza vaccine, require **two doses of influenza vaccine**, four weeks apart.

The influenza strains in FluMist® Quadrivalent are cold-adapted and temperature sensitive, they replicate in the nasal mucosa rather than the lower respiratory tract.

ADVANTAGES:

- Needle Free Administration;
- Intranasal administration elicits mucosal immunity, which mimics natural infection more closely than the Inactivated Trivalent (TIV) and Quadrivalent Influenza Vaccine (QIV).

PRECAUTIONS:

- Significant nasal congestion;
- Use of antiviral agents; and
- Close association with a severely immunocompromised person.

CONTRAINDICATIONS:

- Anaphylaxis to a previous dose of the vaccine or hypersensitivity to any of the non-medicinal ingredients including egg protein;
- Children <24 months of age;
- Severe asthma, as defined as currently on oral or high dose inhaled glucocorticosteroids or active wheezing;
- Medically attended wheezing in 7 days prior to vaccination with FluMist®;
- Children 2-17 years of age receiving aspirin or aspirin-containing therapy;
- Pregnant women;
- Anyone with a compromised immune system due to disease and/or receiving therapy; and
- Egg allergy

ADVERSE REACTIONS:

- Nasal congestion/Runny Nose;
- Headache;
- Sore Throat;
- Cough;
- Weakness;
- Muscle Aches; and
- Fever.



PROVIDE A RECORD!

*** ALERT ***

Please provide a record of immunization to your clients/patients when you immunize them against influenza. Many people require proof of influenza immunization in order to carry out regular duties at work and/or continue to attend classes. For example, if a health care worker is immunized against influenza, but is unable to produce proof of immunization, in the event of an influenza outbreak in a facility or hospital, the health care worker would be excluded from providing care or be required to take an antiviral for the duration of the influenza outbreak.

Egg Allergy

The National Advisory Committee on Immunization (NACI) has concluded that egg allergic individuals may be vaccinated against influenza using inactivated TIV and QIV without a prior influenza vaccine skin test and with the full 0.5ml dose for adults and children.

The vaccine may be given in any setting where vaccines are routinely administered. However, immunizers administering vaccines should be prepared for and have the necessary equipment to respond to a vaccine related emergency at all times. Live Attenuated Influenza Vaccine (LAIV) should not be given to persons with a history of egg allergy as there is limited data to support administration of LAIV in these individuals.

References

NACI(2015). An Advisory Committee Statement (ACS) National Advisory Committee on Immunization (NACI) Canadian Immunization Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2015-2016. Retrieved from <http://www.phac-aspc.gc.ca/naci-cni/flu-2015-grippe-eng.php>

7 Ways to avoid becoming infected with the influenza virus

“The flu virus can live between 2 to 8 hours on surfaces. A sneeze can spread flu droplets up to 2 meters (6 feet) away.”



Get the flu shot

- The most effective way to protect yourself and your family from the flu.
- Every year Ontario’s flu shot program prevents 30,000 emergency room visits and 200,000 doctor’s office visits.



Wash your hands often

- Wash with soap and water, taking care to lather for at least 15 seconds.
- The virus can live on your hands for up to 3 hours so always clean them properly to avoid making others sick.



Keep an alcohol-based hand sanitizer (gel or wipes) nearby

- Must be at least 60% alcohol to be effective.
- Wash with soap and water if your hands look dirty.



Cover your mouth and nose with a tissue when you cough or sneeze

- Cough into your upper sleeve if you don’t have a tissue.
- Throw the tissue out right away—don’t put it in your pocket or on your desk.



Avoid touching your face

- The flu virus usually enters your body through the eyes, nose or mouth.
- Avoid holding your face in your hands or rubbing your eyes.



Stay at home when you’re sick

- Viruses can spread easily in large crowds.



Keep common surfaces and items clean and disinfected

- Viruses can live on hard surfaces like countertops, door handles, computer keyboards and phones for up to 2 days.

Importance of the “Cold Chain”

As per the Ontario Ministry of Health and Long-Term Care *Vaccine Storage and Handling Guidelines* (2012) the “cold chain” consists of the materials, equipment and procedures used to maintain vaccines in the required temperature range of **+2 °C to +8 °C** from the time of manufacturing until the vaccines are administered to individuals. The guidelines facilitate proper storage and handling of publicly funded vaccine to minimize wastage, and promote vaccine safety and efficacy.

When the cold chain is not maintained, vaccines lose their potency resulting in a loss of vaccine effectiveness to protect against vaccine preventable disease and/or an increase in local reactions post-vaccination. Adverse cold chain exposures are cumulative, permanent, irreversible and costly.

Providers in receipt of publicly funded vaccines must meet the following requirements:

- Digital temperature monitoring devices are in place on all refrigerators used to store publicly funded vaccines
- The digital temperature monitoring device is checked twice daily and the temperature is documented in the Temperature Log Book upon arrival to the office and before office closing to ensure refrigerator temperatures remain between **+2 °C to +8 °C**; and
- Vaccine Storage and Handling Guidelines and materials are available and are easily accessible

If at any time the cold chain requirements are not met, contact RCDHU immediately at **(613)735-8653** for guidance and do not use or dispose of any vaccine. If it has been identified that the minimum cold chain requirements are not met by a health care provider, RCDHU has the authority to withhold vaccines until compliance issues have been resolved to ensure appropriate vaccine storage and handling. At minimum, an annual cold chain inspection will be conducted by an RCDHU representative as per *Section 41* of the Health Promotion and Protection Act (HPPA).

Reference:

Ministry of Health and Long-Term Care. (2012). *Vaccine Storage and Handling Guidelines*. Retrieved from http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/guidance/guide_vaccine_storage.pdf

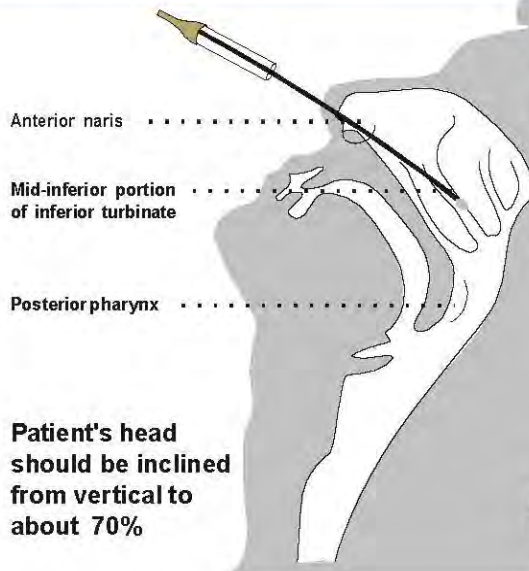
Nasopharyngeal Specimen Collection for Influenza Like Illness (ILI)



NASOPHARYNGEAL SPECIMEN COLLECTION

Ontario
Agency for Health
Protection and Promotion
Agence de protection et
de promotion de la santé

Nasopharyngeal swab method for Respiratory Virus Collection



The laboratory needs high levels of organism to culture successfully for respiratory viruses such as RSV, Influenza A & B or parainfluenza virus.

A properly taken nasopharyngeal swab will yield high levels of organism.

1. Insert flexible nasopharyngeal swab into one nostril.
2. Press the swab tip on the mucosal surface of the mid-inferior turbinate.
3. Briefly rotate the swab once it has been inserted.
4. Leave swab in place for a few seconds to absorb material.
5. Withdraw swab and insert into transport medium.
6. Break swab shaft at score line.

N. B. Rule of thumb to determine when swab is placed properly: insert swab to one-half the distance from the tip of the nose to the tip of the earlobe.

Reference Public Health Ontario (2015). *Virus Respiratory Kits order #:390082*. Retrieved from <http://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/Kit%20Instruction%20Sheets/Virus-Respiratory.aspx>

Summary of the 2014/2015 Influenza season for RCDHU

August 31, 2014 to September 1, 2015:

31 Institutional Respiratory Infection Outbreaks

19 of the 31 Institutional Respiratory Infection Outbreaks were influenza-confirmed

71 Laboratory confirmed Influenza Cases.

The majority of influenza A(H3N2) viruses characterized in Canada during the 2014/2015 season show genetic and antigenic evidence of mismatch to the vaccine strain (A/Texas/50/2012(H3N2)-like) that had been chosen in February 2014 by the WHO for inclusion in the 2014-15 trivalent and quadrivalent vaccines for the northern hemisphere.

The following websites are useful for following Local, Provincial and National Influenza trends:

<http://www.rcdhu.com/Pages/InfectiousDiseases/id-outbreak-status-reports.html>

<http://www.publichealthontario.ca/en/ServicesAndTools/SurveillanceServices/Pages/Ontario-Respiratory-Virus-Bulletin.aspx>

<http://www.phac-aspc.gc.ca/fluwatch/>

If you are considering treatment for Influenza Like Illness (ILI)... Take a Swab!

The results of Nasopharyngeal (NP) swabs assist public health officials to determine the prevalence of influenza infection within our communities. Positive influenza swabs are also subtyped which gives an indication of vaccine efficacy.

RCDHU provides NP kits to Long-Term Care Homes and Retirement Residences in the event of a respiratory institutional outbreak.

NP Swabs are available for general order from Public Health Ontario Laboratories by completing the form at the following link:

www.publichealthontario.ca/en/eRepository/Specimen_containers_and_supplies_requisition.pdf

Mission: Renfrew County and District Health Unit protects and promotes the health and well-being of all residents through leadership, partnership, accountability and service excellence.

Vision: Optimal health for all in Renfrew County and District.