



Influenza Program Overview



FNIHB – Alberta Region

September 27, 2024



For videoconference and Zoom
assistance, call 1-888-999-3356



Reminder:
This videoconference
will be recorded.



Land Acknowledgement

The FNIHB CDC and Nursing Education Teams respectfully acknowledge we are situated on Treaty 6, 7, & 8 territories, the traditional lands of First Nations and Métis people.

We are thankful to play, work, and live along side First Nations and Métis people.

Acknowledgements

Resources from:

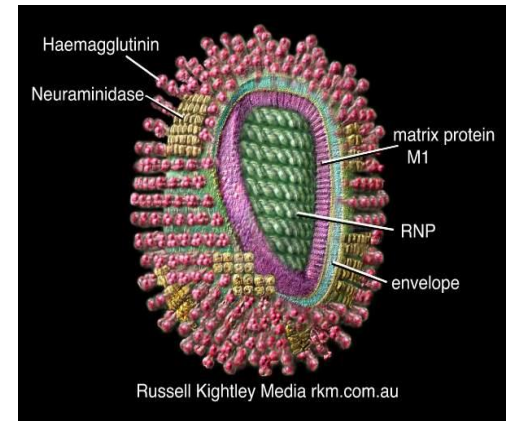
- the National Advisory Committee on Immunization (NACI),
- Alberta Health,
- Albert Health Services,
- OKAKI vaccine data,
- FluWatch Canada

Learning Objectives



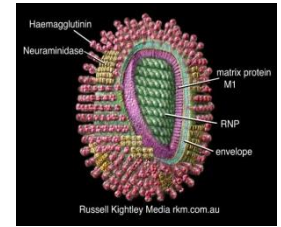
At the end of the presentation, participants will:

- Understand what influenza is and its potential impact
- Be knowledgeable about influenza vaccine and related programming
- Be able to implement influenza surveillance activities
- Be able to implement TB Screening for those with At Risk Medical Conditions



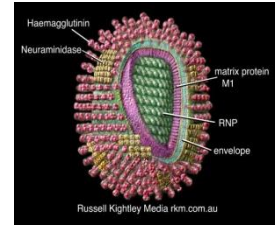
BACKGROUND INFORMATION

What is Influenza?



- Commonly known as “the flu”, influenza is a highly contagious infection of the airways caused by the influenza virus.
- Referred to as “seasonal” as these viruses circulate during the winter season in the northern hemisphere
- The timing and duration of influenza varies: cases can occur throughout the year, however the “season” is usually considered to be from late September/early October through March, but most often activity peaks in January or later
 - Outbreaks have been reported as early as October and as late as May.

What is Influenza?

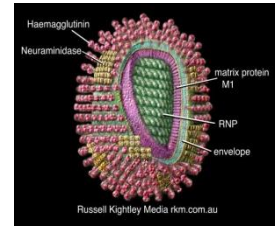


Influenza typically starts with sudden onset of:

- Headache, chills and cough
- Followed by:
 - fever
 - loss of appetite
 - muscle aches and fatigue
 - runny nose, sneezing, watery eyes
 - sore throat
- Nausea, vomiting and diarrhea may also occur, especially in young children.

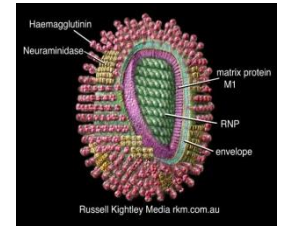


A, B and C Influenza Viruses



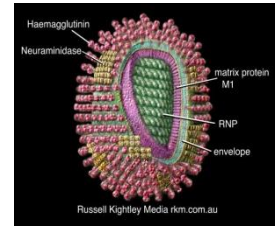
- Influenza A and B viruses cause seasonal epidemics/outbreaks, while type C causes mild respiratory illness
 - Influenza A viruses are divided into subtypes based on surface proteins:
 - hemagglutinin (H) and neuraminidase (N).
 - Influenza B viruses are not divided into subtypes, but generally fall in 2 strain families (lineages):
 - Yamagata and Victoria like viruses
- Vaccines only protect against types A and B

Influenza Types – A and B



Type A (seasonal, avian, swine . . .)	Type B (seasonal influenza)
Can cause significant disease	Generally causes milder disease but may also cause severe disease
Infects humans and other species (e.g. birds, pigs)	Limited to humans
Can cause epidemics and pandemics (worldwide epidemics)	Generally causes milder epidemics

Influenza Types – A and B

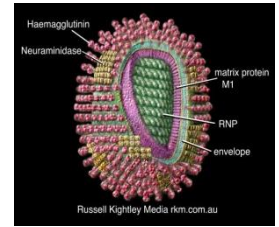


- Small changes in influenza viruses occur continually (drift)
 - New strains may not be recognized by the body's immune system.
 - A person infected with a specific influenza virus strain develops immunity against that specific strain.
- Strains in seasonal vaccine are updated to align with any changes in circulating strains
 - Usually, at least one change each season
- Annual influenza immunization recommended to protect against infection from changing viruses

The myth of the “Stomach Flu”

- Many people use the term “stomach flu” to describe illnesses with nausea, vomiting or diarrhea. These symptoms can be caused by many different viruses, bacteria or parasites.
- Influenza is a respiratory disease – not a stomach or intestinal disease.
 - While vomiting, diarrhea and nausea can sometimes occur with influenza (particularly with children), these problems are not the main symptoms of influenza.

How Serious is Influenza?



- In Canada, from August 27, 2023 to August 24, 2024 (weeks 35 to 34),
 - 4,516 influenza-associated hospitalizations were reported by participating provinces and territories.
 - Adults aged 65 years of age and older accounted for 45% of reported hospitalizations.
 - The highest cumulative hospitalization rates were among adults 65 years of age and older (199/100,000) and children under 5 years of age (139/100,000).

*Source – FluWatch Report: July 21 to August 24, 2024 (Weeks 20 – 34) <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/fluwatch/2023-2024/week-30-34-july-21-august-24-2024.html>

Influenza Summary for 2023-2024 in Alberta

Influenza Summary

Laboratory-confirmed seasonal influenza cases and severe outcomes in Alberta, 2023-2024

	Cases (n)	Influenza A cases (n)	Influenza B cases (n)	Hospitalizations (n)	ICU admissions (n)	Deaths (n)
Alberta	16,229	11,877	4,352	3,348	363	177
Calgary Zone	4,858	3,524	1,334	1,052	93	49
Central Zone	2,180	1,614	566	453	41	32
Edmonton Zone	5,398	3,995	1,403	1,129	130	61
North Zone	2,745	1,987	758	451	77	21
South Zone	1,048	757	291	263	22	14

Source - Alberta Health: www.alberta.ca/stats/dashboard/respiratory-virus-dashboard.htm?data=summary#summary

Influenza Summary for 2023-2024 in Alberta First Nations

- Number of individuals hospitalized due to influenza **68**
- Number of individuals who died from influenza **10**

Statistics from AB FNIHB CDC 2023

How is Influenza Spread?

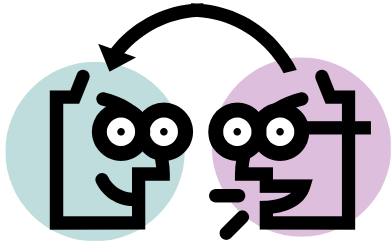
- Influenza is easily spread when an infected person sneezes, coughs or even talks. (**Droplet**)
- The virus gets into the air and can be breathed in by others.
- Exposure to the virus can also occur when your hand touches something that has the virus on it (like hands or objects) and then you touch your eyes, nose or mouth.
 - Hard surfaces: virus can survive for 1 – 2 days but is only infectious for about 8 hours
 - Soft surfaces: virus can survive 8 – 12 hours but is only infectious for a few minutes (**Contact**)

Note: Influenza can be spread even before symptoms start.

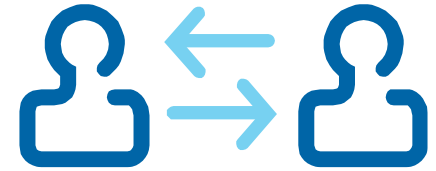
Influenza Incubation

- Time from exposure to developing symptoms:
 - is 1 to 4 days;
 - average ~ 2 days.



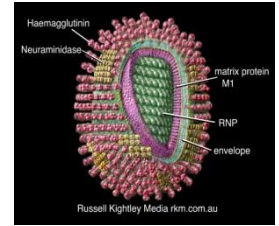


Influenza Infectivity



- Most healthy adults may be infectious from 1 day **before** symptoms develop through 5 days **after** becoming ill.
 - Age and health of the person will impact how long contagious
 - Young children and people with weakened immune systems may be infectious > 1 week.
- Some people can be infected but have no symptoms – they can still spread the virus
 - Best Practice: all Health Care Workers receive influenza immunization

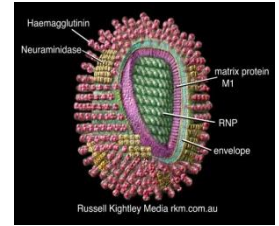
Who is at Higher Risk of Developing Complications



Influenza can lead to other health problems, especially for individuals who:

- Have heart or lung conditions, diabetes, a weak immune system, a lot of extra weight, or other health problems
- Live in a care facility
- Are under 5 years of age
- Are over 65 years of age
- Are pregnant
- Are Indigenous

Complications of Influenza



Complications of Influenza can include:

- pneumonia (bacterial and viral)
- ear and sinus infections
- dehydration
- worsening of chronic medical conditions such as congestive heart failure, asthma, or diabetes

Treatment of Influenza



- Non-complicated cases of influenza are generally managed at home – “self-care”
 - Bed rest
 - Analgesics
 - Fluids
 - Time (typically 3-7 days for the majority of people, although cough and malaise can persist for >2 weeks, especially in elderly people and those with chronic lung disease).

Influenza Prevention



- Annual influenza immunization
- Cover your cough
- Hand hygiene
- Avoid touching eyes, nose or mouth
- Clean and disinfect high touch surfaces
- Healthy lifestyle (exercise, water, diet, avoid smoke)
- Avoid crowds when influenza is around

Influenza Prevention



Handwashing:

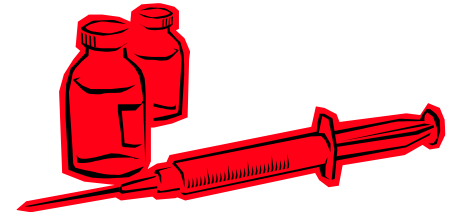
- Use regular soap – antibacterial soap not recommended
 - Lather and friction for at least 20 seconds
 - Rinse well
 - Dry well

Influenza Prevention



Selfcare at Work

- Frequently wipe down keyboard, mouse and phone
- If ill, stay home.
- Practice hand hygiene frequently
 - especially after contact with high touch surfaces
 - before eating



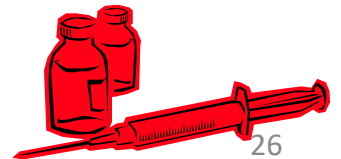
INFLUENZA VACCINES



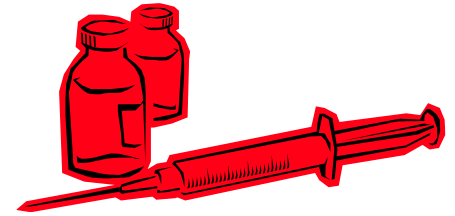
Influenza Vaccine Development

Each February, the WHO recommends which strains should be included in the Influenza vaccines for the Northern Hemisphere.

- A new vaccine is formulated each year based on these recommendations
- Each vaccine lot is tested on healthy individuals to ensure the vaccine is safe and effective.

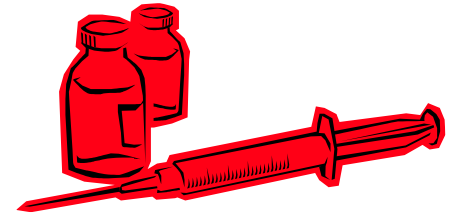


Influenza Vaccine



- There are 4 components in the quadrivalent vaccine (*2 Type A & 2 Type B*) and 3 components in trivalent vaccines (*2 Type A & 1 Type B*)
 - Tailored to match the strains projected to be in circulation

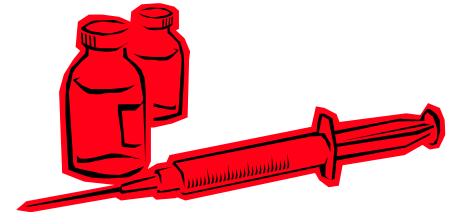
Influenza Vaccine



Inactivated (killed) vaccines:

- The vaccine cannot cause influenza disease
- Humoral antibody levels, which correlate with vaccine protection, are generally achieved 2 weeks after immunization; immunity usually lasts less than one year
- Initial antibody response may be lower in the elderly and in individuals who are immunocompromised.

Influenza Vaccine



- Children between 6 months of age up to and including 8 years of age ***require 2 doses the first year they get a seasonal influenza immunization.***
 - Only require 1 dose in subsequent years
- Everyone else only needs 1 dose each influenza season

Effectiveness of Influenza Vaccines



Vaccine effectiveness depends on the similarity between vaccine strains and the strains in circulation during influenza season, as well as individual factors.

Effectiveness of Influenza Vaccines



- The body's immune response from vaccination diminishes within a year.
- Influenza viruses change frequently, so the vaccine is updated each year to keep up with the changes.

The Ever-Changing Virus

Influenza viruses undergo continuous change in two ways:

1. The first, known as antigenic drift occurs when small genetic mutations lead to changes in the surface proteins of influenza viruses.
2. The second is when influenza A virus undergoes a significant and abrupt change which is known as antigenic shift. Influenza pandemics occur when most humans have little or no immunity to a novel influenza A virus which leads to sustained human-to-human transmission and community-wide outbreaks.

Alberta Public Health Disease Management Guidelines – Seasonal Influenza, Sept 2024

Effectiveness of Influenza Vaccines



- Vaccine efficacy of 50% or lower in healthy adults has been identified during select seasons of vaccine mismatch.
- A vaccine that is not perfectly matched can still offer protection against related viruses making illness milder and preventing complications.

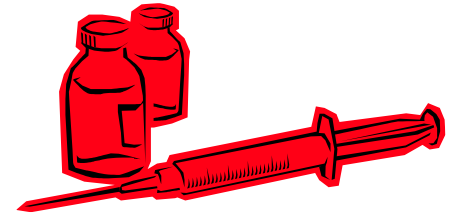
Summary of Influenza Vaccine Doses Administered in First Nations Communities, 2017-2024

Flu Season Year	Total Doses Administered	2 nd Doses (6 mo - 8 yr olds)
2023-2024	8,998	Did not retrieve
2022-2023	9,060	36
2021-2022	10,469	25
2020-2021	12,811	35
2019-2020	14,173	98
2018-2019	14,173	82
2017-2018	13,156	82

Data Source: OKAKI Analytics –
CHIP Regional Reports

SEASON PROGRAM OVERVIEW

Influenza Vaccine



Three quadrivalent inactivated standard dose influenza vaccines will be used for the universal influenza program:

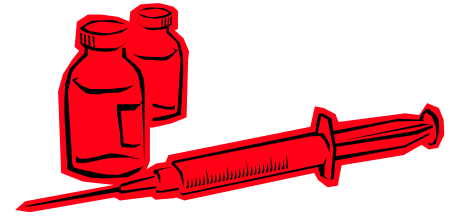
- **Flucelvax[®] Quad** (Prefilled syringe)
- **FluLaval[®]Tetra** (Multidose vial)
- **Fluzone[®]Quadrivalent** (Multidose vial)

Note: Vaccine depots around the province are receiving different standard dose vaccines, so your influenza order set in AVI may show only two of the three standard dose vaccines.

One quadrivalent inactivated high dose influenza vaccine is available for individuals 65 years of age and older

- **Fluzone[®] HD (High Dose)** (prefilled syringe)
 - Has 4 times the amount of antigen than “regular” Fluzone

Immunization



- The universal program is for anyone 6 months of age and older who lives, works or studies, or is temporarily visiting in Alberta.
 - Includes those on visiting from other provinces
 - Can provide influenza immunization to individuals working in the community even if they don't live there

Groups for whom influenza vaccination is particularly important

- People at high risk of influenza-related complications or hospitalization
- People capable of transmitting influenza to those at high risk
- Others

Source: 2024-2025 NACI Statement: List 1 of section II

People at high risk of influenza-related complications or hospitalization:

- All individuals who are pregnant
- People of any age who are residents of nursing homes and other chronic care facilities
- Adults 65 years of age and older
- All children 6–59 months of age
- Indigenous peoples

Adults and children with the following chronic health conditions:

- cardiac or pulmonary disorders (includes bronchopulmonary dysplasia, cystic fibrosis, and asthma)
- diabetes mellitus and other metabolic diseases
- cancer, immune compromising conditions (due to underlying disease, therapy or both)
- renal disease
- anemia or hemoglobinopathy
- neurologic or neurodevelopmental conditions
- morbid obesity (body mass index [BMI] of 40 kg/m² and over)
- children 6 months to 18 years of age undergoing treatment for long periods with acetylsalicylic acid, because of the potential increase of Reye's syndrome associated with influenza

Source: 2024-2025 NACI Statement: List 1 of section II

People capable of transmitting influenza to those at risk:

- health care and other care providers in facilities and community settings
- household contacts, both adults and children, of individuals at high risk, whether or not the individual at high risk has been vaccinated:
 - household contacts of individuals at high risk
 - household contacts of infants less than six months of age, as these infants are at high risk but cannot receive influenza vaccine
 - members of a household expecting a newborn during the influenza season
- those providing regular childcare to children 0 to 59 months of age, whether in or out of the home
- those who provide service within closed or relatively closed settings to people at high risk (e.g. crew on a ship)

Source: 2024-2025 NACI Statement: List 1, section II

Others recommended for flu vaccine:

- Essential community service workers
 - To minimize health-related absenteeism and public disruption during epidemics
- Poultry handlers
 - Preventing infection from human influenza prevents theoretical risk of a worker being co-infected with avian influenza virus' (reassortment of genes)
 - Poultry culling operations due to avian flu is high risk

Source: 2024-2025 NACI Statement: List 1 of section II

NACI statement 2024-2025

- Health Care Workers who have direct patient contact should consider it an essential component of their standards of care to receive annual influenza immunization as a way to protect themselves and their patients.
- This should be considered part of their responsibility to provide the highest standard of care.

Source: 2024-2025 NACI Statement

Influenza Vaccine Quadrivalent Inactivated

BIOLOGICAL PAGE



Section 7	Biological Product Information	Standard # 07.265	
Created and approved by	Provincial Immunization Program Standards and Quality		
Approval date	September 4, 2015	Revised	September 25, 2024

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Manufacturer	Seqirus Canada Inc.	GlaxoSmithKline Inc.	Sanofi Pasteur Inc.
Classification	Quadrivalent, inactivated subunit	Quadrivalent, inactivated split virion vaccine	
Indications for Provincially Funded Vaccine	<p>For persons 6 months of age and older.</p> <p>If available, high-dose quadrivalent inactivated influenza vaccine is recommended for adults 65 years of age and older and adults 18 years of age and older who are:</p> <ul style="list-style-type: none"> • Hematopoietic stem cell transplant (HSCT) recipients; • CAR T-cell therapy recipients; or • Solid organ or islet transplant (SOT) candidates or recipients <p>Note:</p> <ul style="list-style-type: none"> • ONLY persons who live, work, go to school or are visiting in Alberta are eligible to receive provincially funded influenza vaccine. 		

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Influenza Strains for 2024-2025 Season	Cell-Cultured A/Wisconsin/67/2022 (H1N1)pdm09-like virus A/Massachusetts/18/2022(H3N2)-like virus B/Austria/1359417/2021(B/Victoria lineage)-like virus B/Phuket/3073/2013(B/Yamagata lineage)-like virus	Egg-Based A/Victoria/4897/2022 (H1N1)pdm09-like virus A/Thailand/8/2022(H3N2)-like virus B/Austria/1359417/2021(B/Victoria lineage)-like virus B/Phuket/3073/2013(B/Yamagata lineage)-like virus	
Dose	0.5 mL		
Route	I.M.		

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Schedule	<p>6 months up to and including 8 years of age who <u>have not</u> received influenza vaccine in a previous season:</p> <ul style="list-style-type: none"> • 2 doses with a minimum interval of 4 weeks between doses <p>6 months up to and including 8 years of age who <u>have</u> received influenza vaccine in a previous season:</p> <ul style="list-style-type: none"> • 1 dose <p>9 years of age and older:</p> <ul style="list-style-type: none"> • 1 dose 		

FLUCELVAX QUAD**FluLaval Tetra****Fluzone Quadrivalent**

- CAR T-cell therapy recipients without a prior history of HSCT who received influenza vaccine pre-CAR T-cell therapy are eligible to restart their influenza vaccine series, beginning at least 3 months post-CAR T-cell therapy. Consultation with their physician is not necessary as long as a clearance letter has been received to proceed with inactivated vaccines.
- For HSCT recipients who had their post-HSCT vaccine series interrupted by CAR T-cell therapy, see the following HSCT guidance:
 - Principles of Immunization in Hematopoietic Stem Cell Transplant Recipients and Solid Organ Transplant Recipients
 - Immunization for Adult HSCT Recipients
 - Immunization for Child HSCT Recipients

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Contraindications/ Precautions	<p>Contraindications:</p> <ul style="list-style-type: none"> • Infants less than 6 months of age. • Known hypersensitivity to any component of the vaccine excluding eggs. • Anaphylactic or other allergic reactions to a previous dose of influenza vaccine. • Known history of Guillain Barré Syndrome (GBS) within 6 weeks of a previous dose of influenza vaccine • Individuals presenting with a serious acute febrile illness <ul style="list-style-type: none"> ○ Recommendations should be provided for these individuals to be immunized when their symptoms have resolved. ○ Individuals with non-serious febrile illness may be immunized. 		

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
	<p>Precautions:</p> <ul style="list-style-type: none"> • Egg allergy is not considered a contraindication for inactivated influenza vaccine. • Egg-allergic individuals may be safely immunized using inactivated influenza vaccine without a prior influenza vaccine skin test and with the full dose of vaccine, irrespective of a past severe reaction to egg. They can be immunized in any setting and should be kept under observation for 30 minutes following the administration of inactivated influenza vaccine. • Known history of oculorespiratory syndrome (ORS) symptoms that included lower respiratory symptoms within 24 hours of receiving influenza vaccine, pending consultation with the Medical Officer of Health to review the risks and benefits of further influenza immunization. 		

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Possible Reactions	<p>Common:</p> <ul style="list-style-type: none"> • Pain, tenderness, redness, and swelling at the injection site • Fever, shivering • Fatigue, drowsiness, malaise • Irritability, abnormal crying • Headache, arthralgia, myalgia • Loss of appetite • Gastrointestinal symptoms (nausea, vomiting, diarrhea, abdominal pain) <p>Uncommon:</p> <ul style="list-style-type: none"> • Pruritus, bruising, haemorrhage, warmth and induration at injection site • Lymphadenopathy • Dizziness • Rash • Nasopharyngitis • Otitis media • Cough, runny nose, sneezing, sore throat 		

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
	<p>Rare:</p> <ul style="list-style-type: none"> • Anaphylaxis, allergic reaction • Guillain-Barré Syndrome (GBS) • ORS is defined by the following symptoms occurring within 24 hours of immunization: <ul style="list-style-type: none"> ○ bilateral red eyes and ○ one or more of the following respiratory symptoms (cough, wheeze, chest tightness, difficulty breathing, difficulty swallowing, hoarseness, sore throat) with or without facial swelling. <p>Note: People who have an occurrence or recurrence of ORS upon immunization do not necessarily experience further episodes with future immunizations.</p> <ul style="list-style-type: none"> • As with any immunization, unexpected or unusual side effects can occur. Refer to product monograph for more detailed information. 		

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Pregnancy	No contraindication. Inactivated influenza immunization is recommended for all pregnant women, at any stage of pregnancy, due to the risk of influenza morbidity. The safety of inactivated influenza vaccine during pregnancy has been reviewed and has not shown evidence of harm to the mother or fetus.		
Lactation	No contraindication		

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Composition	<p>Each 0.5 mL dose contains:</p> <ul style="list-style-type: none"> • 15 mcg influenza virus haemagglutinin from each of the four virus strains • Disodium phosphate dihydrate • Magnesium chloride hexahydrate • Potassium chloride • Potassium dihydrogen phosphate • Sodium chloride • Water for injection • Trace residual amounts of: <ul style="list-style-type: none"> ○ beta-propiolactone ○ cetyltrimethylammonium bromide ○ polysorbate 80 <p>*Thimerosal is present in the multi-dose product only (25 mcg/0.5 mL dose)</p> <p>Propagated in Madin Darby Canine Kidney (MDCK) cells</p>	<p>Each 0.5 mL dose contains:</p> <ul style="list-style-type: none"> • 15 mcg influenza virus haemagglutinin surface antigen from each of the four virus strains • phosphate buffered saline composed of: <ul style="list-style-type: none"> ○ sodium chloride ○ potassium chloride ○ disodium hydrogen phosphate heptahydrate ○ potassium dihydrogen phosphate ○ water for injection • α-tocopheryl hydrogen succinate • polysorbate 80 • trace residual amounts of: <ul style="list-style-type: none"> ○ egg proteins ○ formaldehyde ○ sodium deoxycholate 	<p>Each 0.5 mL dose contains:</p> <ul style="list-style-type: none"> • 15 mcg influenza virus haemagglutinin from each of the four virus strains • Formaldehyde • Sodium phosphate-buffered, isotonic sodium chloride solution • Triton X-100 <p>*Thimerosal is present in the multidose product only (25 mcg/0.5 mL dose)</p> <p>Propagated in embryonated chicken eggs</p>

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
		<ul style="list-style-type: none"> ○ ethanol ○ sucrose <p>*Thimerosal is present in the multi-dose product only (50 mcg/0.5 mL dose)</p> <p>Propagated in the allantoic cavity of embryonated hens' eggs.</p>	

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Blood/Blood Products	Does not contain human blood/blood products.		
Bovine/Porcine Products	Does not contain bovine or porcine products.		
Latex	Does not contain latex.		
Interchangeability	For children requiring a second dose of influenza vaccine, either quadrivalent inactivated influenza vaccine or quadrivalent live attenuated influenza vaccine can be used as long as there is a minimum interval of 4 weeks between doses. If a child receives a dose of trivalent inactivated influenza vaccine as their first dose, quadrivalent inactivated influenza vaccine can be administered as the second dose.		

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Administration with Other Products	<ul style="list-style-type: none"> • May be given at the same time as most other inactivated and live vaccines using a separate needle and syringe for each vaccine. The same limb may be used if necessary, but different sites on the limb must be chosen. • Space RSV vaccine by 2 weeks before or after seasonal influenza and/or seasonal COVID-19 vaccines. <ul style="list-style-type: none"> ○ Limited efficacy and safety studies have been conducted on giving RSV vaccine at the same time as other vaccines. ○ Some studies suggest that giving RSV vaccine and other vaccines at the same time may not produce as strong of an immune response. The clinical significance of this is unknown and more evidence is required to understand if this is a risk. • Prioritize giving seasonal influenza and seasonal COVID-19 vaccines first during respiratory season. • Consider the dose valid if RSV vaccine is inadvertently administered without the recommended 2- or 6-week spacing interval. • For co-administration with COVID-19 vaccines, refer to the “Administration with Other Products” section in the relevant COVID-19 vaccine biological page. 		

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Appearance	<ul style="list-style-type: none"> • Clear to slightly opalescent suspension. • Shake product well before administration. 	<ul style="list-style-type: none"> • Opalescent translucent to off-white suspension • Shake product well before administration. 	<ul style="list-style-type: none"> • Clear to slightly opalescent suspension. • Shake product well before administration
Storage	<ul style="list-style-type: none"> • Store at +2°C to +8°C • Do not freeze. • Store in original packaging when possible to protect from light. • Discard 28 days after first puncture into the vial for the multi-dose product. • Do not use beyond the labeled expiry date. 		
Antigen Code	FLU		

	FLUCELVAX QUAD	FluLaval Tetra	Fluzone Quadrivalent
Notes	<ul style="list-style-type: none"> • 1992 (approx.): Influenza vaccine split virus Influenza split virus vaccine first used in Canada in approximately 1992. (Fluviral & Vaxigrip) • 2009 October: Influenza vaccine for H1N1 Pandemic universal program for everyone six months of age and older. • 2009-October: Influenza seasonal vaccine universal program to include all Albertans six months of age and older. • 2015 August 12: Influenza Vaccines 2015-2016 season: Fluad (all Albertans aged 65 years and older), Flumist Quadrivalent, Fluviral, Influvac (This is the vaccine of choice for adults 18 to 64 years of age). • 2016 August 29: Influenza vaccines 2016-2017 season: Fluzone, Fluad, Flumist • 2017 July: Influenza Vaccines 2017-2018 season: Fluzone, Fluad. • 2018 August: Influenza Vaccines 2018-2019 season: Fluzone, FluLaval Tetra. • 2019: Influenza Vaccine 2019-2020 season: Fluzone, FluLaval Tetra. • 2020: Influenza Vaccines 2020-2021 season: Fluzone, FluLaval Tetra, Alfuria Tetra, Trivalent Fluzone HD (65 years of age and older who reside in long term care beds). • 2021: Influenza Vaccine 2021-2022 season: Fluzone, FluLaval Tetra, Alfuria Tetra, Fluzone HD (65 years of age and older). • 2022: Influenza Vaccine 2022-2023 season: Fluzone, FluLaval Tetra, Alfuria Tetra, Fluzone HD (65 years of age and older). • 2023 Influenza Vaccines 2023-2024 season: Fluzone, FluLaval Tetra, Fluzone HD (65 years of age and older). • 2024 Influenza Vaccines 2024-2025 season: Flucelvax, Fluzone, FluLaval Tetra, Fluzone HD (65 years of age and older). 		
Related Resources	<ul style="list-style-type: none"> • Alberta Health Services Website (2024). Influenza Immunization Influenza (flu) (alberta.ca) • Alberta Health Services Website (2024). Influenza Immunization: Information for Health Professionals Influenza Immunization Health Professionals Alberta Health Services 		

References

- Alberta Health. (2024, September) Influenza Vaccine Quadrivalent Inactivated. In *Alberta immunization Policy: Biological Products*. (2024). Government of Alberta
- GlaxoSmithKline Inc. (April 26, 2024). FLULAVAL TETRA (2024-2025) Quadrivalent Influenza Vaccine (Split Virion, Inactivated). Health Canada drug product database. https://pdf.hres.ca/dpd_pm/00075393.PDF.
- Kwong, J. C., Vasa, P. P., Campitelli, S. H., et al. (2013). Risk of Guillain-Barré syndrome after seasonal influenza vaccination and influenza health-care encounter: a self-controlled study. *Lancet Infectious Disease*, 13, 769-76.
- National Advisory Committee on Immunization. (2006, January03). *Oculo-respiratory syndrome following influenza vaccination: Review of post-marketing surveillance through four influenza seasons in Canada*. Public Health Agency of Canada.
- National Advisory Committee on Immunization (2024, July 25)4). *Statement on seasonal influenza vaccine for 2024-2025*. Public Health Agency of Canada. **Error! Hyperlink reference not valid.**
- Public Health Agency of Canada. (2024, September 3). Influenza. In *Canadian Immunization Guide: Part 4: Immunizing Agents*. Government of Alberta
- Sanofi Pasteur Inc. (April 23, 2024). FLUZONE® Quadrivalent (2024-2025) Influenza Virus Vaccine Quadrivalent Types A and B (Split Virion). Health Canada drug product database. https://pdf.hres.ca/dpd_pm/00075545.PDF
- Seqirus Canada Inc. (April 16, 2024) FLUCELVAX® QUAD (2024-2025) Influenza Vaccine (surface antigen, inactivated, prepared in cell cultures). Health Canada drug product database. https://pdf.hres.ca/dpd_pm/00076974.PDF

Influenza Vaccine High-Dose Quadrivalent Inactivated



BIOLOGICAL PAGE

Section 7	Biological Product Information	Standard # 07.266
Created and approved by	Provincial Immunization Program Standards and Quality	
Approval date	August 15, 2020	Revised September 25, 2024

FLUZONE High-Dose	
Manufacturer	Sanofi Pasteur
Classification	Quadrivalent, split virus inactivated influenza vaccine
Indications for Provincially Funded Vaccine	<p>For persons 65 years of age and older</p> <p>Adults 18 to 64 years of age:</p> <ul style="list-style-type: none"> • Hematopoietic stem cell transplant (HSCT) recipients; • CAR-T-cell therapy recipients; or • Solid organ or islet transplant (SOT) candidates or recipients <p>Note:</p> <ul style="list-style-type: none"> • ONLY persons who live, work, go to school or are visiting in Alberta are eligible to receive provincially funded influenza vaccine.
Influenza Strains for the 2024-25 Season	<p>A/Victoria/4897/2022 (H1N1)pdm09-like virus</p> <p>A/Thailand/8/2022(H3N2) like virus</p> <p>B/Austria/1359417/2021(B/Victoria lineage)-like virus</p> <p>B/Phuket/3073/2013 (B/Yamagata lineage)-like virus</p>
Vaccine Code	FLU-HD
Antigen Code	FLU
Licensed for	Individuals 65 years of age and older.

FLUZONE High-Dose	
Dose	0.7 mL
Route	I.M.
Schedule	<p>65 years of age and older:</p> <ul style="list-style-type: none"> • 1 dose <p>Adults 18 to 64 years of age who are an HSCT recipient, a CAR T-cell therapy recipient or a SOT candidate or recipient:</p> <ul style="list-style-type: none"> • 1 dose <p>Note:</p> <ul style="list-style-type: none"> • CAR T-cell therapy recipients without a prior history of HSCT who received influenza vaccine pre-CAR T-cell therapy are eligible to restart their influenza vaccine series, beginning at least 3 months post-CAR T-cell therapy. Consultation with their physician is not necessary if a clearance letter has been received to proceed with inactivated vaccines. • For HSCT recipients who had their post-HSCT vaccine series interrupted by CAR T-cell therapy, see the following HSCT guidance: <ul style="list-style-type: none"> ○ Principles of Immunization in Hematopoietic Stem Cell Transplant Recipients and Solid Organ Transplant Recipients. ○ Immunization for Adult HSCT Recipients.

FLUZONE High-Dose	
Contraindications/ Precautions	<p>Contraindications:</p> <ul style="list-style-type: none"> • Known hypersensitivity to any component of the vaccine excluding eggs. • Anaphylactic or other allergic reactions to a previous dose of influenza vaccine. <p>• Known history of Guillain Barré Syndrome (GBS) within 6 weeks of a previous dose of influenza vaccine.</p> <ul style="list-style-type: none"> • Individuals presenting with a serious acute febrile illness. <ul style="list-style-type: none"> ○ Recommendations should be provided for these individuals to be immunized when their symptoms have resolved. ○ Individuals with non-serious febrile illness may be immunized. <p>Precautions:</p> <ul style="list-style-type: none"> • Egg allergy is not considered a contraindication for inactivated influenza vaccine. <ul style="list-style-type: none"> ○ Egg-allergic individuals may be safely immunized using inactivated influenza vaccine without a prior influenza vaccine skin test and with the full dose of vaccine, irrespective of a past severe reaction to egg. They can be immunized in any setting and should be kept under observation for 30 minutes following administration of inactivated influenza vaccine. ○ Known history of oculorespiratory syndrome (ORS) symptoms that included lower respiratory symptoms within 24 hours of receiving influenza vaccine pending consultation with the Medical Officer of Health to review the risks and benefits of further influenza immunization.

FLUZONE High-Dose

Possible Reactions

Common:

- Pain, redness, swelling, induration, bruising at the injection site
- Shivering
- Malaise
- Headache, myalgia

Uncommon:

- Pruritus at the injection site
- Fever
- Vertigo
- Nausea, diarrhea
- Cough

FLUZONE High-Dose

Possible Reactions

Rare:

- Anaphylaxis, allergic reaction
 - Urticaria
 - Arthralgia
 - Fatigue
 - Dizziness
 - Vomiting
 - Flushing
 - Pruritus
 - Pain in extremity
 - Guillain-Barré Syndrome (GBS)
 - ORS is defined by the following symptoms occurring within 24 hours of immunization:
 - bilateral red eyes **and**
 - one or more of the following respiratory symptoms (cough, wheeze, chest tightness, difficulty breathing, difficulty swallowing, hoarseness, sore throat) **with or without facial swelling.**
- Note:** People who have an occurrence or recurrence of ORS upon immunization do not necessarily experience further episodes with future immunizations.
- As with any immunization, unexpected or unusual side effects can occur. Refer to product monograph for more detailed information.

FLUZONE High-Dose**Pregnancy**

Animal reproductive studies have not been conducted with Fluzone High-Dose Quadrivalent. It is also not known whether Fluzone High-Dose Quadrivalent can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity

Lactation

It is not known whether FLUZONE High-Dose Quadrivalent is excreted in human milk

FLUZONE High-Dose

Composition

Each 0.7 mL dose contains:

- 60 mcg influenza virus hemagglutinin from each of the four virus strains
- Formaldehyde
- Sodium phosphate-buffered isotonic sodium chloride solution
- Octylphenol ethoxylate (Triton X-100)
- Egg ovalbumin (egg protein) (propagated in embryonated chicken eggs).

Blood/Blood Products

Does not contain human blood/blood products.

Bovine/Porcine Products

Does not contain bovine or porcine products.

Latex

Does not contain latex.

Interchangeability

Any other inactivated influenza vaccine may be interchanged for persons 65 years of age and older.

FLUZONE High-Dose

Administration with Other Products

- May be given at the same time as most other inactivated and live vaccines using a separate needle and syringe for each vaccine. The same limb may be used if necessary, but different sites on the limb must be chosen.
- Space RSV vaccine by 2 weeks before or after seasonal influenza and/or seasonal COVID-19 vaccines.
 - Limited efficacy and safety studies have been conducted on giving RSV vaccine at the same time as other vaccines.
 - Some studies suggest that giving RSV vaccine and other vaccines at the same time may not produce as strong of an immune response. The clinical significance of this is unknown and more evidence is required to understand if this is a risk.
- Prioritize giving seasonal influenza and seasonal COVID-19 vaccines first during respiratory season.
- Consider the dose valid if RSV vaccine is inadvertently administered without the recommended 2- or 6-week spacing interval.
- For co-administration with COVID-19 vaccines, refer to the “Administration with Other Products” section in the relevant COVID-19 vaccine biological page.

FLUZONE High-Dose	
Appearance	<ul style="list-style-type: none">• Clear to slightly opalescent in colour.• Shake product well before administration.
Storage	<ul style="list-style-type: none">• Store at +2°C to +8°C.• Do not freeze.• Store in original packaging, when possible, to protect from light.

FLUZONE High-Dose

Notes

- 1992 (approx.): Influenza vaccine split virus Influenza split virus vaccine first used in Canada in approximately 1992 (Fluviral & Vaxigrip).
- 2009 October: Influenza vaccine for H1N1 Pandemic universal program for everyone six months of age and older.
- 2009 October: Influenza seasonal vaccine universal program to include all Albertans six months of age and older.
- 2015 August 12: Influenza Vaccines 2015-2016 season: Fluad (all Albertans aged 65 years and older.), Flumist Quadrivalent, Fluviral, Influvac (This is the vaccine of choice for adults 18 to 64 years of age).
- 2016 August 29: Influenza vaccines 2016-2017 season: Fluzone, Fluad, Flumist.
- 2017 July: Influenza Vaccines 2017-2018 season: Fluzone, Fluad.
- 2018 August: Influenza Vaccines 2018-2019 season: Fluzone, FluLaval Tetra.
- 2019: Influenza Vaccines 2019-2020 season: Fluzone, FluLaval Tetra.
- 2020: Influenza Vaccines 2020-2021 season: Fluzone, FluLaval Tetra, Alfuria Tetra, Fluzone HD (65 years of age and older who reside in long term care beds).
- 2021: Influenza Vaccine 2021-2022 season: Fluzone, FluLaval Tetra, Alfuria Tetra, Fluzone HD (65 years of age and older).
- 2022: Influenza Vaccine 2022-2023 season: Fluzone, FluLaval Tetra, Alfuria Tetra, Fluzone HD (65 years of age and older).
- 2023 Influenza Vaccines 2023-2024 season: Fluzone, FluLaval Tetra, Fluzone HD (65 years of age and older).
- 2024 Influenza Vaccines 2024-2025 season: Flucelvax Quad, Fluzone, FluLaval Tetra, Fluzone HD (65 years of age and older). Added off-license recommended used for high dose vaccine for adults 18 years of age and older who are hematopoietic stem cell transplant (HSCT) recipients, CAR T-cell therapy recipients or solid organ or islet transplant (SOT) candidates or recipients.

FLUZONE High-Dose

Related Resources

Alberta Health Services Website (2024). [Influenza Immunization Health Professionals | Alberta Health Services](#)

References

Alberta Health. (2024, September) Influenza Vaccine High Dose Quadrivalent Inactivated. In *Alberta immunization Policy: Biological Products*. (2024). Government of Alberta

Kwong, J. C., Vasa, P. P., Campitelli, S. H., et al. (2013). *Risk of Guillain-Barré syndrome after seasonal influenza vaccination and influenza health-care encounter: a self-controlled study*. *Lancet Infectious Disease*, 13, 769-76. 3.

National Advisory Committee on Immunization (2006, January03). *Oculo-respiratory syndrome following influenza vaccination: Review of post-marketing surveillance through four influenza seasons in Canada*. Public Health Agency of Canada.

National Advisory Committee on Immunization (2024, July 25)4). *Statement on seasonal influenza vaccine for 2024-2025*. Public Health Agency of Canada.

Public Health Agency of Canada. (2019, December) Influenza. In *Canadian Immunization Guide: Part 4. Immunizing Agents*. Government of Canada.

Sanofi Pasteur Inc. (April 23, 2024). FLUZONE High-Dose Quadrivalent (2024-2025). High-Dose Quadrivalent Influenza Virus Vaccine - Types A and B (Split Virion). Health Canada drug product database. https://pdf.hres.ca/dpd_pm/00076979.PDF

Guillain Barré Syndrome (GBS)

- GBS illness affects the nervous system
 - Rare: general risk is about 2 cases/100,000 person years
 - Characterized by muscle weakness and sometimes paralysis, usually beginning in the legs
 - Complete or near complete recovery in most cases
- GBS is thought to be triggered by an infection
 - *Campylobacter jejuni* infection most commonly precedes GBS
 - Other respiratory or intestinal illness have preceded GBS (i.e. Cytomegalovirus, Epstein-Barr Virus, *Mycoplasma pneumoniae*)

Guillain Barré Syndrome (GBS)

- In 1976, the “swine flu” vaccine was associated with increased risk of GBS: not found with any other vaccines since
- Absolute risk of GBS after influenza vaccine is about 1 excess case per 1,000,000 vaccines above background rate of 10 – 20 cases/million
- Risk of GBS associated with *influenza infection* is much greater than that associated with the immunization

Oculorespiratory Syndrome (ORS)

ORS Case Definition: **(onset within 24 hours of immunization)**

- bilateral red eyes **and** one or more respiratory symptoms (cough, wheeze, chest tightness, difficulty breathing, difficulty swallowing, hoarseness or sore throat) **with or without** facial swelling

Immunization recommendations following client reported ORS are based on:

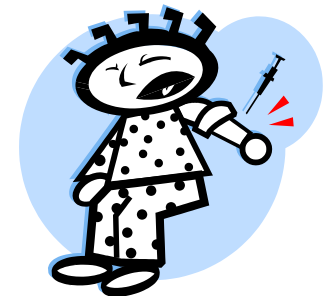
- Risk/benefit
- Severity of symptoms as perceived by the individual who experienced the symptoms

Contact the CDC Team to have MOH review.

Adverse Reaction Reporting

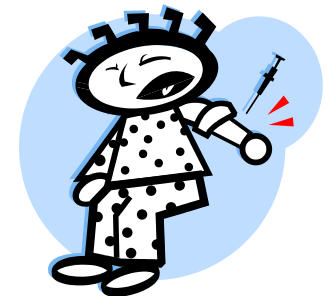
Local reactions are reportable if they have:

- Onset within 48 hours following immunization **and**
 - Swelling that extends past the nearest joint **or**
 - Severe pain that interferes with the normal use of the limb lasting > 4 days **or**
 - Reaction requires hospitalization



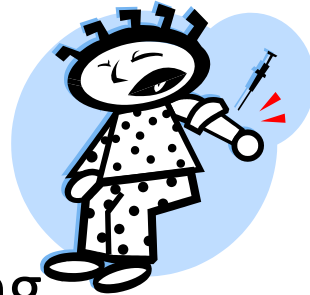
Adverse Reaction Reporting

- Any of the following are also reportable adverse reactions:
 - GBS
 - ORS
 - Anaphylaxis – report immediately after treating
 - Other allergic reactions
 - Any unexpected reaction



Adverse Reaction Reporting

- Use Alberta Health form: “Report of Adverse Reaction following Immunization”
 - only available on FNIHB Onehealth Website
 - speak to FNIHB CDC Team before completing
 - send completed form to FNIHB CDC Team
 - expect written response from FNIHB CDC Team
- Severe reactions are reportable within **24 hours**. All other reactions within one week.

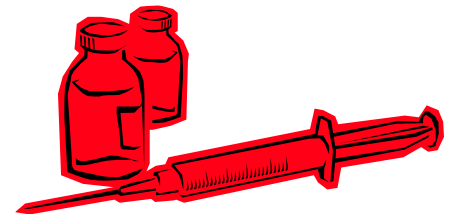


VACCINE MANAGEMENT

Vaccine Management

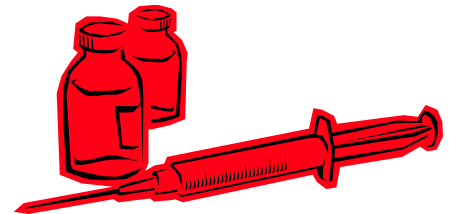
Communicate with your vaccine depot regarding influenza vaccine ordering and delivery schedules.

- # of doses shipped are based on doses administered last year
- Add influenza doses into AVI inventory as soon as received
- Reconcile vaccine in AVI every week.



Vaccine Management

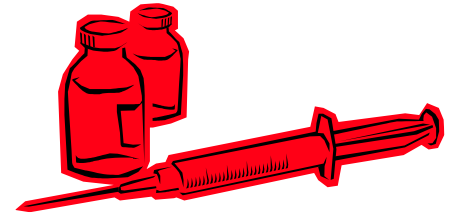
- Store at +2°C to +8°C in original packaging. Do not freeze
- **All multidose vials must be dated upon opening**
- Check expiry date of all products administering
- Communicate use of nearly expired vials to other staff members
- Vaccine should be withdrawn from the vial by the immunizer administering the vaccine
- Do not mix vaccine from different vials
- Do not pre-draw vaccine





IMMUNIZATION

Immunization



Soft roll out (not advertised) when vaccine is received:

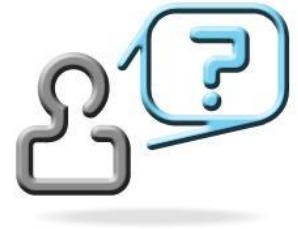
- Can begin immunizing individuals at greatest risk (HCW, home care clients, etc.)
- Can include influenza vaccine as part of routine childhood immunization clinics, include child and anyone who accompanies them.

October 15, 2024:

- Advertised influenza vaccine clinics can begin.

Prevnar 20 is offered throughout the year and can be given at same time as influenza vaccine. A recorded session on the vaccine is on the FNTN website.

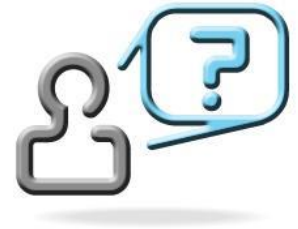
Who Can Immunize



In order to be part of the Influenza immunization team, **all NPs, RNs, LPNs and paramedics *must* participate in or view the recording of this in-service.**

- Resources that **must** also be reviewed
 - Anaphylaxis Policy
 - Best Practices: Vaccine Management

Who Can Immunize



Following this presentation:

- RNs (public health and home care) and NPs:
 - **can** provide Influenza immunizations to eligible clients **of all age groups** if they have the knowledge, skills, and competence to administer the vaccine
- LPNs **can** provide Influenza immunizations to eligible clients **older than 5 year of age** if they meet CLPNA's requirements and have the knowledge, skills and competence to administer the vaccine. *Contact CLNPA if more information or guidance is needed.*

Who Can Immunize



Paramedics and Immunization

- There are different levels of emergency responders:
 - EMR: emergency medical responder
 - PCP: primary care paramedic
 - ACP: advanced care paramedic
- Administering vaccines falls within Authorized Restricted Activities for PCP and ACP.

Province of Alberta, Health Professions Act: Paramedics Profession Regulation. Alberta Regulation 1151-2016

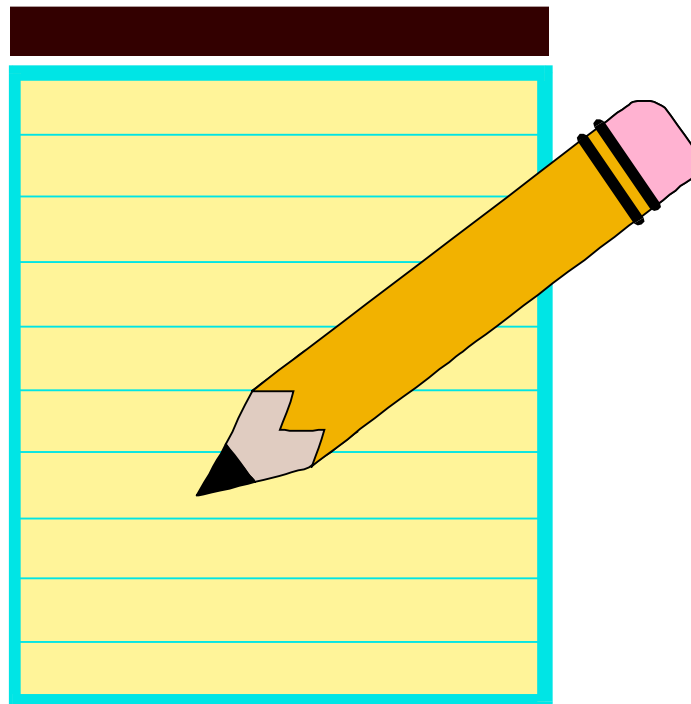
Who Can Immunize



- The Nursing Education team has updated the *Mandatory Immunization Certification and Recertification Program* policy and guidelines for primary care and advanced care paramedics.
 - Attending or viewing the *Annual Influenza Program Overview* is part of the requirement

Contact the Nursing Education Team if you have any questions:
santepubliquedgspniab-publichealthfnihbab@sac-isc.gc.ca

Recording & Data Collection



Influenza Immunization Record

Last Name		First Name		Initial	Gender
Provincial Health Care Number/ULI			Age	Date of Birth (dd-Mon-yyyy)	
Alberta Address				Phone (Home)	
City	Province	Postal Code		Phone (Other)	
Out of Province Address (if applicable)			Province	Status <input type="checkbox"/> New to Alberta <input type="checkbox"/> Visitor	

Informed Consent

Reason Code

50	Routine Recommended Immunization (Note: Use 50A for Meditech entry)
----	--

Vaccine (Manufacturer)

Fluzone® Quadrivalent (SF) 0.5 mL IM
Lot # _____

FluLaval® Tetra (GSK) 0.5 mL IM
Lot # _____

Fluzone® High-Dose Quadrivalent (SF) 0.7 mL IM
Lot # _____

Other _____
Lot # _____

← Prevnar 20

Dose Annual
 1 of 2 2 of 2

Site **Arm** Left Right
Leg Left Right

Date Vaccine Given (dd-Mon-yyyy)	Time Vaccine Given (24 hrs)
Immunizer's Full Name (first, last)	Designation
Signature	Meditech ID Number

Influenza Client Immunization Record and Care After Immunization

Keep this document as your personal immunization record.

The *Influenza Client Immunization Record and Care After Immunization* sheet will remind clients of side effects and act as a record of immunization.

Immunization Record				
Last Name	First Name	Middle Initial		
Date of Birth <i>(dd-Mon-yyyy)</i>	Date of Influenza Immunization <i>(dd-Mon-yyyy)</i>			
For children who need 2 doses of Influenza vaccine:	Dose <input type="checkbox"/> Annual <input type="checkbox"/> 1 of 2 <input type="checkbox"/> 2 of 2			
Next dose is due on or after _____.	Vaccine (Manufacturer) <input type="checkbox"/> Fluzone Quadrivalent (Sanofi Pasteur) <input type="checkbox"/> FluLaval Tetra (GlaxoSmithKline) <input type="checkbox"/> Fluzone High-Dose Quadrivalent (Sanofi Pasteur) <input type="checkbox"/> Other _____			
	Lot Number _____			
Care After Immunization				
Side Effects Many people have no side effects from the influenza vaccine. If you do have side effects, they tend to be mild and go away in a few days. Side effects may include:				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> redness, swelling, bruising, a hard spot, or feeling sore where you had the needle crying or getting upset easily feeling tired or unwell a headache a fever or chills </td> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> body aches or sore joints not feeling hungry or not wanting to eat (poor appetite) feeling sick to your stomach (nausea), stomach pain, vomiting (throwing up), or loose stool (diarrhea) </td> </tr> </table>			<ul style="list-style-type: none"> redness, swelling, bruising, a hard spot, or feeling sore where you had the needle crying or getting upset easily feeling tired or unwell a headache a fever or chills 	<ul style="list-style-type: none"> body aches or sore joints not feeling hungry or not wanting to eat (poor appetite) feeling sick to your stomach (nausea), stomach pain, vomiting (throwing up), or loose stool (diarrhea)
<ul style="list-style-type: none"> redness, swelling, bruising, a hard spot, or feeling sore where you had the needle crying or getting upset easily feeling tired or unwell a headache a fever or chills 	<ul style="list-style-type: none"> body aches or sore joints not feeling hungry or not wanting to eat (poor appetite) feeling sick to your stomach (nausea), stomach pain, vomiting (throwing up), or loose stool (diarrhea) 			
It is rare to have a serious side effect. Call Health Link at 811 to report any serious or unusual side effects.				
For more information about the influenza vaccine, read the influenza vaccine information on ahs.ca/immunize or talk to your healthcare provider.				

Pprevnar 20

Influenza Immunization Record

How long do influenza immunization records need to be kept?

- If entering the full information into CHIP or onto hard copy immunization record, NCR is considered to be a transitory document and can be shredded once entered.
 - Full information: name, DOB, PHN, full vaccine details (product, lot number, dose, site), immunizer
- ***If only entering partial information, or not entering into CHIP or onto hard chart record:***
 - Children: keep **30 years**
 - Adults (18+): keep **11 years**

Data collection

- All immunization providers are required to account for vaccine doses administered, vaccine doses wasted and vaccine doses on hand. The rationale for requiring data collection is:
 - To determine immunization rates
 - To be accountable for doses received/administered
 - To monitor vaccine safety
 - For planning and operational decisions for subsequent seasonal programs

Immunization/Reporting Tools

Weekly Influenza Clinic Summary 2022 – 2023 Influenza Season

Please submit by noon on Monday of each week (or on Tuesday following a long weekend) starting October 11, 2022 until influenza immunizations are no longer being given.

Fax to the CDC Team at 780-495-8070 or scan/email to equipecmtab-abc-dc-team@sac-isc.gc.ca

Note: this form does not need to be completed if all influenza immunizations have been entered into CHIP and the FNIHB CDC Team has permission to access the weekly influenza immunization numbers electronically. Contact OKAKI for more information.

Weekly Influenza Clinic Summary

- Only required if permission is not given to share CHIP data to FNIHB Region.
- Doesn't need to be done if all vaccines are entered into CHIP and if Okaki received community permission to share with us.

Summary of Influenza Immunizations for the week of: _____

Community: _____

Contact: _____ Phone: _____

Document the number of influenza immunizations that have been given for each category:

Category	Number Immunized		
	Dose 1 of 2*	Dose 2 of 2*	Annual*
Children 6 months to 8 years of age*			
9 - 64 years of age			
65 years of age and older			
Column Totals			

Total Influenza Immunizations for the week _____

*Notes: Children 6 months up to and including 8 years of age who HAVE NOT received influenza vaccine in a previous season and require two doses, document the doses as "1 of 2" or "2 of 2". Children 6 months up to and including 8 years of age who HAVE received influenza vaccine in a previous season and only require one dose, document the dose as "Annual".

SURVEILLANCE



Surveillance

- Part of international process to monitor influenza activity around the world
 - Monitor circulating strains
 - Nasopharyngeal swabs, ILI surveillance
 - Assess effectiveness of current vaccines
 - Contribute toward Pandemic Influenza preparedness



Surveillance



- Components of Surveillance:
 - ILI activity (no activity, sporadic, widespread)
 - NP swabs
 - Weekly surveillance reports
 - ➡ Please call Daylene/Melissa if you hear of anyone admitted to hospital with influenza.
 - ➡ We need to submit a specific report to AH for all cases hospitalized with influenza.
 - ➡ Will need hx of FLU vaccine for current and previous seasons.

ILI Definition

- Influenza Like Illness definition:
 - Acute onset of respiratory illness with fever and cough **and** with one or more of:
 - Sore throat
 - Joint Pain
 - Tenderness or pain in the muscles
 - General exhaustion
 - Laboratory Confirmation



ILI Surveillance

Weekly Influenza Activity Surveillance Report

Weekly Surveillance Report

- Due Monday noon for the previous week ILI activity:

Please fax to the CDC Team (780-495-8070) or scan/email to equipecmstab-abcdeteam@sac-isc.gc.ca by noon each Monday for previous week's activity from October 11, 2022 through May 8, 2023

Community: _____

Contact: _____ Phone: _____

Surveillance Report for the week of _____

Influenza-like Illness (ILI) and other Activity Codes (circle one of the following):

0 No activity in the community

(No influenza-like illness reported, no lab confirmed influenza cases)

1 Minimal Influenza-like activity in the community

(Influenza-like activity reported, no lab confirmed influenza cases)

2 Sporadic influenza activity in the community

(Influenza-like activity reported, one or more lab confirmed influenza cases, no outbreak of influenza cases)

3 Widespread influenza activity in the community

(Influenza-like activity reported, lab confirmed influenza cases, outbreak of influenza cases)

Comments: (additional information regarding ILI, confirmed cases, etc.)

Will be updated and placed on OneHealth

ILI Surveillance

- Begins October 2, 2024 until Spring 2025
 - Each community to designate an individual as key contact and a back-up contact for weekly surveillance
 - Does not need to be a nurse

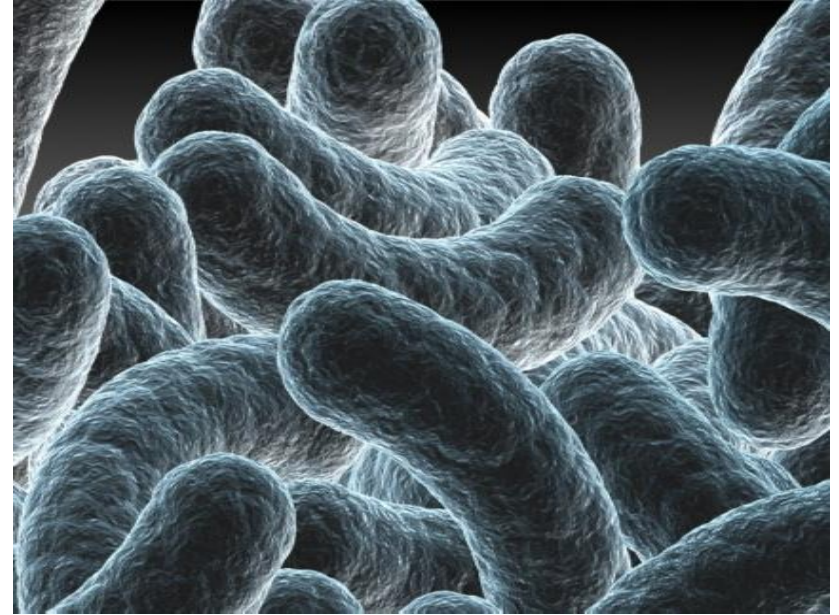


Swabbing for Influenza



- Confirming the cause of ILI in your community is useful
- Typically a few positive flu results may tell the story
- Traditional Resp. Path. Panels include influenza A & B
 - NP swabs in UTM transport media, shipped to APL
 - Dr. Lauren Bilinsky may be the ordering physician





TUBERCULOSIS PROGRAM



TB Screening During Influenza Vaccination Clinics

Goal of Pre-screen Tool:

- Identify those with signs or symptoms possibly indicative of TB disease
- Identify those with certain medical conditions/on certain medication therapies that put them at greater risk for TB disease

Using the pre-screening tool **does not** constitute a completed screen or assessment under the At Risk Medical Conditions (ARMC) Screening Program. Clients who screen positive on either portion of the pre-screening tool need further assessment and interview.

Triage the screens based on symptoms versus no symptoms and presence of medical conditions or medical therapies. Recall clients to complete:

- ✓ *TB History and Symptom Inquiry*
- ✓ *At Risk Medical Conditions Screening Algorithm*

Pre-screening Tool



Are you at risk for TB?

Do you have any of these symptoms?

Cough longer than 3 weeks	Yes	No
Coughing up phlegm	Yes	No
Fever	Yes	No
Sweating at night	Yes	No
Poor appetite and Weight loss	Yes	No
Feeling very tired	Yes	No

1. Have you been told you have any of these conditions?

Diabetes, kidney problems or other conditions that suppress your immune system
Yes or No

2. Are you underweight? Yes No

3. Have you been told you have a positive TB skin test in the past? Yes No

4. Have you had TB disease in the past? Yes No
When? _____

Name: _____

Date: _____

Date of Birth: _____

Phone: _____

This information is for your local community health professionals to help identify your potential health risk for tuberculosis and will be confidential.

Please list any medications you are taking.

September 2018



TB Screening for those with At Risk Medical Conditions

1. Identify those with certain medical conditions/drug therapies that increase their risk of developing TB disease (those already having TB infection)
2. Screen and follow-up for TB using appropriate “**At Risk TB Screening Algorithm**” (High Risk vs. Moderate Risk Screening Algorithm) Protocol and algorithms for this program can be found on OneHealth.
3. Make referrals to TB Services as appropriate and continue to monitor those with At Risk Medical Conditions who have untreated TB infection

Canada Health Canada Santé Canada

Your health and safety... our priority. Votre santé et votre sécurité... notre priorité.

TB HISTORY & SYMPTOM INQUIRY

Client Name: _____ Date: _____

Gender: M F Other _____ Band: _____

D.O.B. (yy-mm-dd) _____ PHN: _____

Health Care Worker: Y/N _____ Homeless: Y/N _____

Previous TB Disease: Y/N Date: _____ Site: _____ Previous Treatments: _____ Date: _____

Contact of Current Case? Y/N Case # _____ Previous exposure to TB: Self Family

Previous Preventive TB Medication: Y/N If yes, when: _____

Medication Status: Date: _____ Result: _____ man BCG: Y/N/Unknown Date of Vaccination: _____

Last Chest X-Ray: Date: _____ Descriptors of TB: _____

Recent Travel: Where: _____ When: _____

Weight: _____ kg Height: _____ cm BMI: _____

Medical History	Yes	No	Comments	Yes	No	Comments
Alcohol Use (amt, frequency)				Smoker (amt, frequency)		
Cancer				Street drugs		
Diabetes				Transplant candidate		
Gastrohepatic				Organ Donor		
HIV/AIDS				Current Medications		Specify
Kidney Disease				Anti-coagulants		
Liver Disease				Anti-convulsants		
Lung Disease				Chemotherapy or Radiation therapy		
Malnutrition (BMI < 20)				Contraceptive medication		
Other Immune suppressive drug(s) or condition(s) (see Medications)				Insulin or oral Hypoglycemics		
				Stressors (dose, frequency, duration)		
				Other		

Current Symptoms	Yes	No	Onset date	Comments
Cough > 3 weeks				
Sputum with cough				
Blood in sputum				
Unexplained weight loss (amt and time frame)				
Poor Appetite				
Fever				
Fatigue				
Night Sweats				
Chest Pain				
Other symptoms (extra pulmonary disease)				
Urinary - hematuria, dysuria				
Swollen lymph nodes				
Other (please specify)				

Date: _____ Signature: _____

At Risk TB Screening Algorithm (First Screen) HIGH RISK

Medical Conditions: Diabetes mellitus, Treatment with: Azathioprine (Imuran), Leflunomide, Other (Specify) _____

Name: First _____ Last _____ DOB: (yyyy-mm-dd) _____ PHN: _____

Community: _____

START HERE Symptom Inquiry

Symptoms of TB present

No symptoms of TB

History of TB disease: Yes - History of TB disease: Date: (yyyy-mm-dd) _____ No

History of positive TB skin test AND/OR History of TB disease? Yes No

Do TB skin test: No Positive: Size: _____ mm Negative: Size: _____ mm

Is the client less than 60 years of age? Yes No

Client interested in taking prophylaxis? Yes No

2. Refer to family physician or nurse practitioner for assessment (including CXR) Date: (yyyy-mm-dd) _____

3. Collect Sputum for AFB x 3. Date 1: (yyyy-mm-dd) _____ Date 2: (yyyy-mm-dd) _____ Date 3: (yyyy-mm-dd) _____

4. Refer to TB Services using the TB Services Referral form. TB File # _____

Date Algorithm completed: (yyyy-mm-dd) _____ Signature: _____

Failed to Alberta Region TB Program - Date: (yyyy-mm-dd) _____ Fax: 780-495-8070

At Risk TB Screening Algorithm (First Screen) MODERATE RISK

Medical Conditions: Diabetes mellitus, Treatment with: Azathioprine (Imuran), Leflunomide, Other (Specify) _____

Name: First _____ Last _____ DOB: (yyyy-mm-dd) _____ PHN: _____

Community: _____

START HERE Symptom Inquiry

Symptoms of TB present

No symptoms of TB

History of TB disease: Yes No

History of positive TB skin test AND/OR History of TB disease? Yes No

Do TB skin test: No Positive: Size: _____ mm Negative: Size: _____ mm

Is the client less than 60 years of age? Yes No

Client interested in taking prophylaxis? Yes No

2. Refer to family physician or nurse practitioner for assessment (including CXR) Date: (yyyy-mm-dd) _____

3. Collect Sputum for AFB x 3. Date 1: (yyyy-mm-dd) _____ Date 2: (yyyy-mm-dd) _____ Date 3: (yyyy-mm-dd) _____

4. Refer to TB Services using the TB Services Referral form. TB File # _____

Date Algorithm completed: (yyyy-mm-dd) _____ Signature: _____

Failed to Alberta Region TB Program - Date: (yyyy-mm-dd) _____ Fax: 780-495-8070

*Other: Some chemotherapy drugs and treatments for psoriasis may qualify. Please consult TB services for more information and guidance. Revision Date: April 2018 Original to client file. Copy to binder/file for annual tracking.

*Other: Some chemotherapy drugs and treatments for psoriasis may qualify. Please consult TB services for more information and guidance. Revision Date: April 2018 Original to client file. Copy to binder/file for annual tracking.

*Other: Some chemotherapy drugs and treatments for psoriasis may qualify. Please consult TB services for more information and guidance. Revision Date: April 2018 Original to client file. Copy to binder/file for annual tracking.



TB Queries

If you have any specific queries relating to TB screening, please contact:

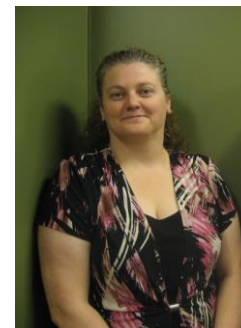
- ***FNIHB TB Program Coordinator:***

Andrea Warman

andrea.warman@sac-isc.gc.ca ph: 780-983-3197

Coordinates activities around general program oversight

Facilitates support in management of cases/contacts as needed



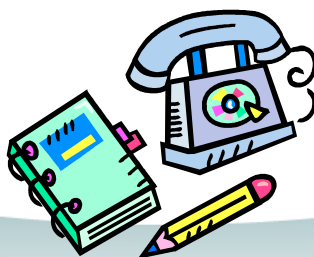
- ***FNIHB TB Screening & Education Nurse:***

Deana Nahachewsky

deana.nahachewsky@sac-isc.gc.ca ph: 780-718-1700

Manages the Screening Programs

Facilitates and delivers education & training to field staff



- **Thank you to everyone who is involved in the influenza program.**
- **You *are* making a difference in the health of the people in the community where you are!**

Questions

