# Influenza Program Overview





FNIHB – Alberta Region

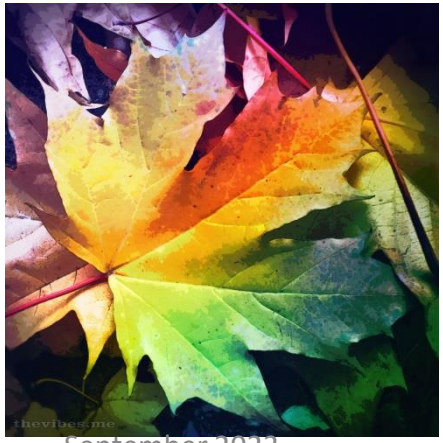
**September 13, 2023**

**For videoconference and Zoom assistance**

**Call 1-888-999-3356**

Canada

# Reminder:
# This videoconference will be recorded.



# Land Acknowledgement

- *We would like to begin by acknowledging that we are on the traditional lands, referred to as Treaty 6 Territory and that the participants of this session, and all the people here, are beneficiaries of this peace and friendship treaty.*

- *Treaty 6 encompasses the traditional territories of numerous western Canadian First Nations, including Cree, Dene, Stoney Nakota Sioux, Saulteaux, and Ojibwe.*

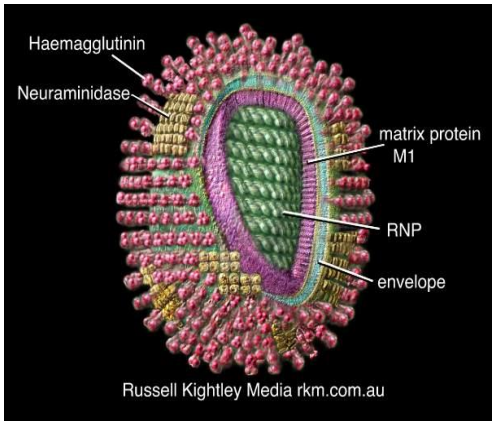
# Acknowledgements

The National Advisory Committee on Immunization (NACI), Alberta Health, Albert Health Services, Statistics Canada, OKAKI vaccine data, FluWatch Canada, and WHO resources have been used in the development of this presentation.

# Learning Objectives

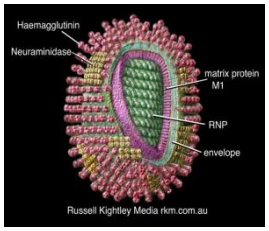
At the end of the presentation, participants will:

- Understand what influenza is and its potential impact
- Be knowledgeable about influenza and Pneumo-P vaccines and related programming
- Understand Influenza programming within COVID-19 disease and vaccine context
- Be able to implement influenza surveillance activities
- Be able to implement TB Screening for those with At Risk Medical Conditions



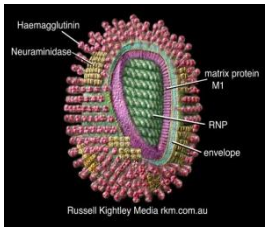

# BACKGROUND INFORMATION

# 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.

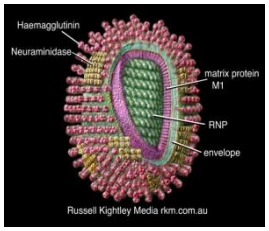
# What is Influenza?




Influenza typically starts with sudden onset of:

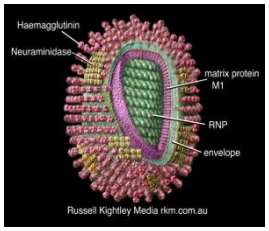
- Headache, chills and cough
- Followed by:
  - fever
  - loss of appetite
  - muscle aches and fatigue
  - runny nose, sneezing, watery eyes
  - sore throat
- Nausea, vomiting and diarrhea may also occur, especially in young children.

# A, B and C Influenza Viruses



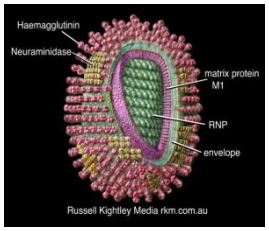

- Influenza A and B viruses cause seasonal epidemics/outbreaks, while type C causes mild respiratory illness
  - Influenza A viruses are divided into subtypes based on surface proteins:
    - hemagglutinin (H) and neuraminidase (N).
  - Influenza B viruses are not divided into subtypes, but generally 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

# Comparison of COVID-19, influenza, common cold, and gastrointestinal (GI) illness

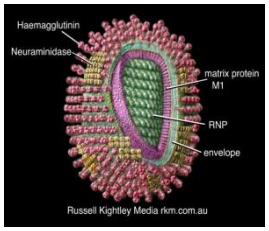
| | COVID-19 | Influenza (Flu) | Cold | GI Illness (Stomach "Flu") |
|---|---|---|---|---|
| Caused by | SARS-CoV-2 virus | Influenza A or Influenza B viruses | Many different kinds of viruses such as rhinovirus or adenovirus | Norovirus (or Norwalk-like viruses) is the most common, but there are many causes of stomach upset |
| Symptoms appear quickly | Sometimes | Yes | No. Symptoms appear gradually | Yes |
| Prevention | Getting the COVID-19 vaccine provides protection from the SARS-CoV-2 virus (also known as COVID-19) | Getting the influenza vaccine every year protects against the strains of the virus going around that season | Cannot be prevented by immunization | Cannot be prevented by immunization |
| **Symptoms** | | | | |
| Fever | Common | Common | Rare | Sometimes |
| Fatigue | Common | Common | Sometimes | Sometimes |
| Cough | Common | Common | Common | No |
| Sneezing | Rare | Sometimes | Common | No |
| Aches and pains | Common | Common | Sometimes | Common |
| Runny or stuffy nose | Rare | Common | Common | No |
| Sore throat | Sometimes | Common | Common | No |
| Diarrhea | Common | Sometimes (especially for children) | Rare | Common |
| Headaches | Common | Common | Rare | Sometimes |
| Shortness of breath | Sometimes | Sometimes | No | No |
| Loss of smell or taste | Sometimes | No | No | No |

Sources: Health Canada, Centers for Disease Control and Prevention

# 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?




- Fortunately, the majority of infected people will recover.
- However, annually in Canada, influenza typically causes approximately
  - 12,200 hospitalizations
  - 3,500 deaths
- Influenza is among the top 10 leading causes of death in Canada

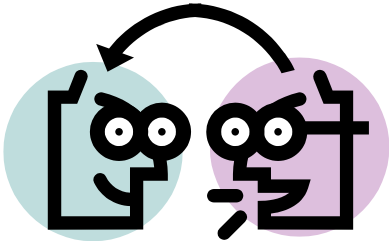
# How is Influenza Spread?

- 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)**

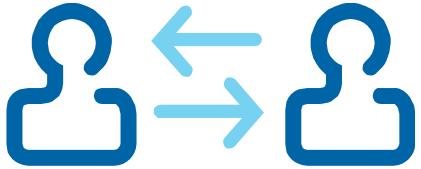
Note: Influenza can be spread even before symptoms start.

# Influenza Incubation

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



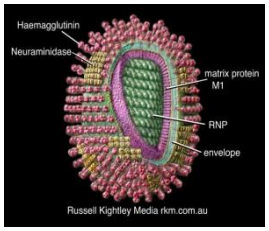
# Influenza Infectivity



- 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

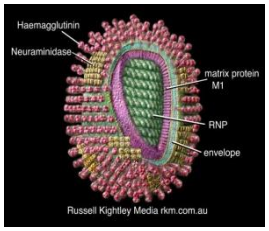
# Who is at Higher Risk of Developing Complications




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

## Self Care 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

# Antiviral Therapy

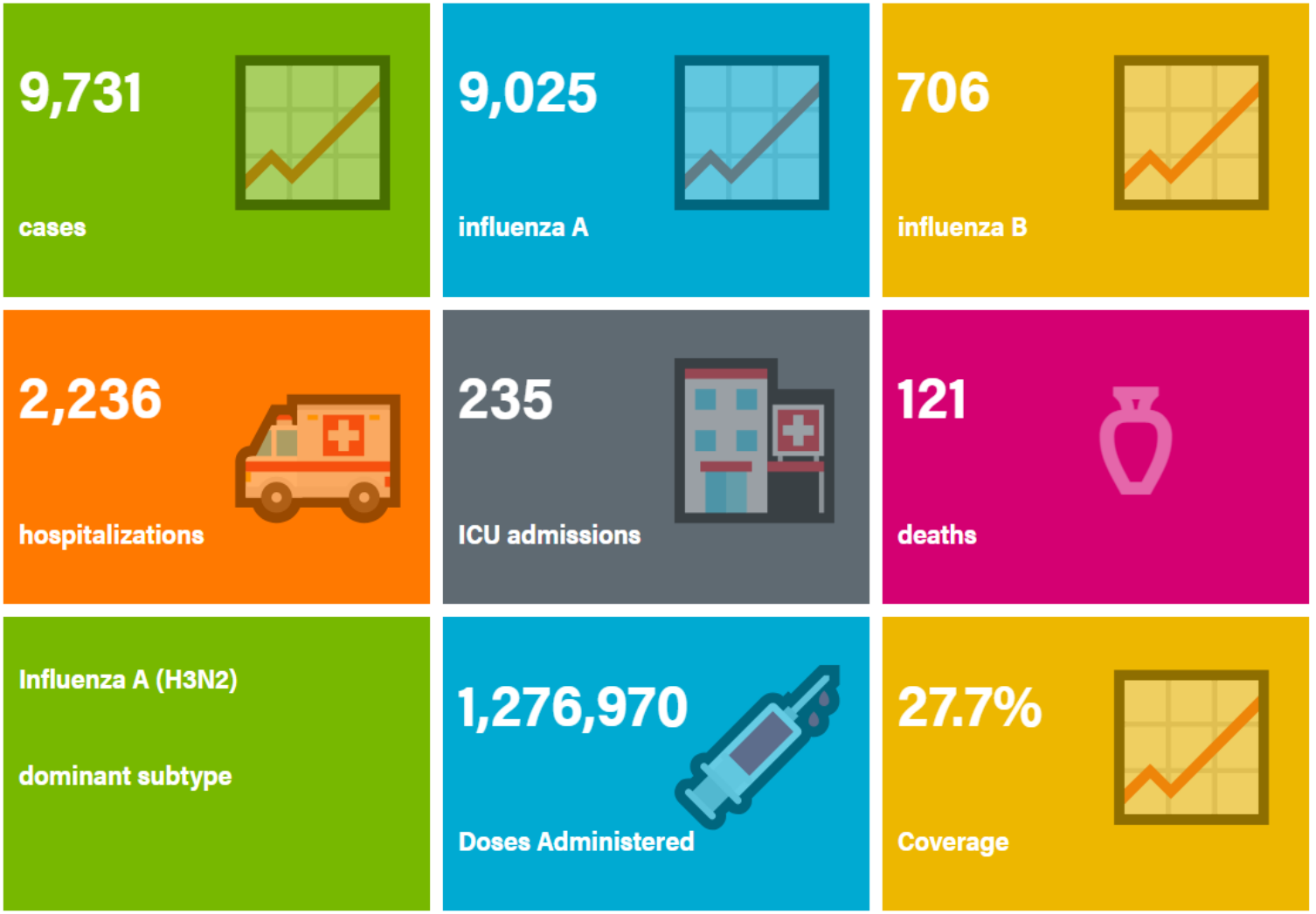
- Antiviral drugs currently used in Canada for the treatment and prevention of seasonal influenza are oseltamivir (Tamiflu®), which is administered orally and zanamavir (Relenza®), which is inhaled.
- Each year, antiviral therapy guidelines are prepared by Association of Medical Microbiology and Infectious Disease Canada (AMMI)

# Public Health Measures Work

- 2020/2021 lab confirmed flu cases in Canada:
  - 69 cases. Influenza cases in Canada stopped almost immediately when COVID restrictions were put in place.
- 2021/2022 lab confirmed flu cases in Canada:
  - 16 126 cases. COVID restrictions easing.
- 2022/2023 lab confirmed flu cases in Canada:
  - 74,315 cases. COVID restrictions eased.

FluWatch Report Weeks 30-34 (Government of Canada, Public Health Agency of Canada)

# Summary of laboratory-confirmed seasonal influenza in Alberta, 2022-2023



# Summary of **On Reserve** Influenza Activity 2022-2023

- Total number of Influenza A/B cases – Unknown
  - 109 discovered from AHS referrals and GenXpert
- Total number of cases Hospitalized – 53 (↑of 17)
  - Subtype of those hospitalized – H3N2
  - Only 2 of 53 were immunized; both with medical issues
- Total number of Deaths – 10 (↑of 7)
  - Aged 29-87 (aver. 58 years). All 3 treaty areas.
  - None immunized
  - Subtypes: H1N1 (5 people); H3N2 (5 people).

Statistics from AB FNIHB CDC 2023

# Summary of **On-Reserve** Influenza Vaccine Doses Administered, 2017-2022

| Flu Season Year | Total Doses Administered | 2nd Doses (6 mo - 8 yr olds) |
|---|---|---|
| 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

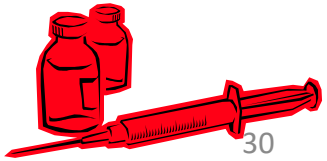
# INFLUENZA VACCINES



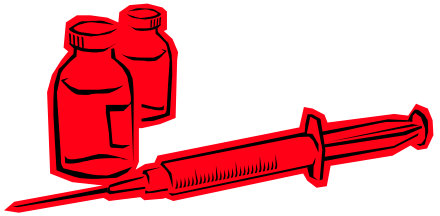
# Influenza Vaccine Development

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.

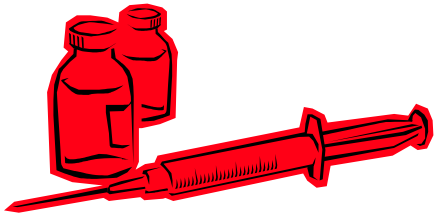


# Influenza Vaccine



- 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

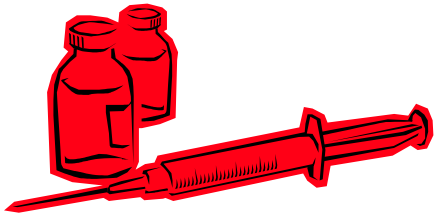
# Influenza Vaccine



Inactivated (killed) vaccines:

- The vaccine cannot cause influenza disease
- The virus is grown in hen eggs, inactivated, broken apart and highly purified
- The vaccine may contain:
  - Thimerosal (preservative in multidose vials)
  - Trace residual amounts of egg proteins, formaldehyde, Triton X-100 (an emulsifier), ethanol, and sucrose
- Check the product monograph for a full list because ingredients vary by vaccine.

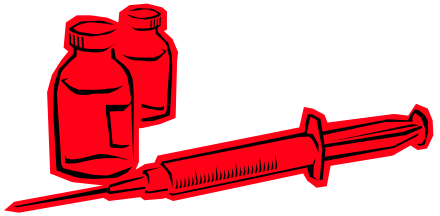
# Influenza Vaccine



Inactivated (killed) vaccines (con't):

- Both humoral and cell-mediated responses play a role in immunity.
- Administration of inactivated influenza vaccine results in the production of IgG antibodies to the virus
- A cytotoxic T lymphocyte response is also initiated
- 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 <u>the first year</u> 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 2023

# 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.

# Effectiveness of Influenza Vaccines

Fluzone™ High Dose (HD) vaccine:

- there is good evidence that Fluzone™ HD provides better protection compared to Fluzone™ standard dose (SD) in adults 65 years of age and older.
  - Rates of seroconversion about 19% higher for 65 years and older (range: 8 – 39%)
  - Higher rates of seroconversion also noted for those 75 years and older.

# 2022 SEASON PROGRAM OVERVIEW

# Co-administration with COVID-19 & other Inactivated Vaccines

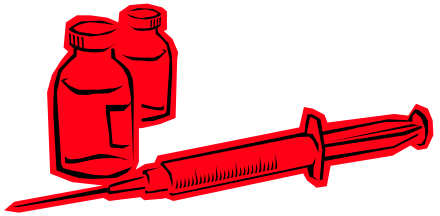
- Alberta Health has determined that COVID-19 vaccines may be co-administered with, or at any time before or after other inactivated or live vaccines to those 6 months and over.

- **COVID-19 and influenza immunizations can be given at the same visit (separate syringes with adequate spacing) or no concern about time intervals between the two vaccines.**

# COVID-19 XBB.1.5 Vaccine

- On Sept 12, 2023 Health Canada authorized the use of the Moderna SPIKEVAX™ COVID-19 vaccine targeting the Omicron XBB.1.5 subvariant for people six months of age and older.
- Alberta Health and AHS are reviewing this recommendation and will be making a public announcement & creating vaccine biological pages in the coming days.

# Influenza Vaccine



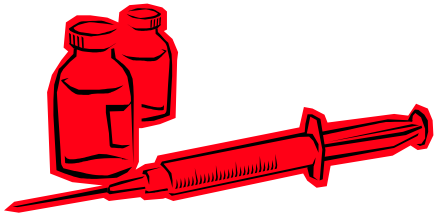
Two quadrivalent inactivated influenza vaccines will be used for the universal influenza program:

- **Fluzone®**
- **FluLaval®Tetra**

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

- **Fluzone® HD (High Dose)**
  - Has 4 times the amount of antigen than "regular" Fluzone®

# Influenza Vaccine



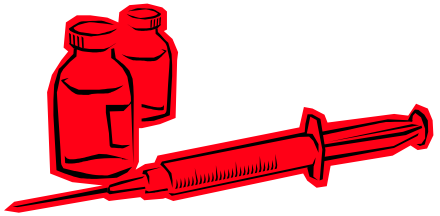
**2022 – 2023 components in influenza vaccines:**

- **A/Victoria**/4897/2022 (H1N1) pdm09 - like virus NEW!
- **A/Darwin**/9/2021(H3N2)-like virus
- **B/Phuket**/3073/2013 (B Yamagata lineage)-like virus
- **B/Austria**/1359417/2021 (B/Victoria lineage)-like virus

Changes from last year's vaccine:

- 1 A strain is different (updated)

# 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
- There is a focus on increasing uptake for:
  - People at high risk of influenza-related complications or hospitalization (identified on slide following)
  - People capable of transmitting influenza to those at risk (identified on slide following)

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

- All pregnant women
- 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 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: 2023 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 child care 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: 2023 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.

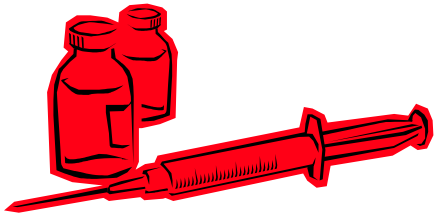
***Source: 2022 NACI Statement: List 1 of section II***

# NACI statement 2023

- 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.

The National Advisory Committee on Immunization (NACI) is a national advisory committee of experts in the fields of pediatrics, infectious diseases, immunology, medical microbiology, internal medicine and public health.

# Influenza Vaccine

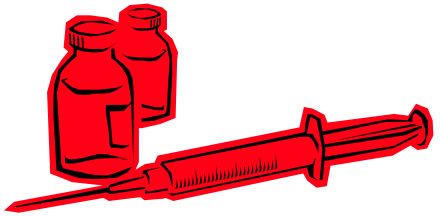


| | Fluzone® (QIV) (Sanofi Pasteur) | FluLaval Tetra™ (QIV) (GlaxoSmithKline) |
|---|---|---|
| Strains included | • **A/Victoria/**4897/2022 (H1N1) pdm09 - like virus<br>• **A/Darwin/**9/2021 (H3N2)-like virus<br>• **B/Phuket**/3073/2013 (B Yamagata lineage)-like virus<br>• **B/Austria**/1359417/2021Victoria lineage)-like virus | |
| Licensed for | 6 months of age and older | 6 months of age and older |
| Packaging | Single dose: pre-filled syringe<br>Multi-dose: 5 mL vial | Multi-dose: 5 mL vial |
| Ingredients | • Formaldehyde<br>• Triton X-100 (prevents aggregation and precipitation)<br>Multidose vials also contain:<br>• Thimerosol<br>See monograph for complete list | Multidose vials contain:<br>• Thimerosol<br>• Trace amounts of formaldehyde, egg proteins, ethanol<br>• Polysorbate 80<br>See monograph for complete list |

# Fluzone High Dose

- For the 2023 flu program:
  - **High Dose quadrivalent** influenza vaccine.
  - Fluzone™ High Dose will be provided for anyone 65 years of age or older; the same as last 2 years

# Influenza Vaccine



| | Fluzone ™HD (QIV) Sanofi Pasteur (High Dose) |
|---|---|
| Strains included | • **A/Victoria/4897**/2022 (H1N1) pdm09 - like virus<br>• **A/Darwin/**9/2021 (H3N2)-like virus<br>• **B/Phuket**/3073/2013 (B Yamagata lineage)-like virus<br>• **B/Austria**/1359417/2021(B/Victoria lineage)-like virus |
| Licensed for | • 65 years of age and older |
| Program use | • 65 years of age and older |
| Packaging | Single Dose: Pre-filled syringe |
| Ingredients | • 60 µg hemagglutinin (HA)<br>  ○ 4 times more than in standard dose vaccine<br>• Formaldehyde<br>• Sodium phasphate<br>• Egg protein, propagated in embryonated chicken eggs<br>• Triton X-100<br>See monograph for complete list |

# Vaccine Eligibility, Dosing & Scheduling

| Age | QIV | QIV High Dose | # of Doses |
|---|---|---|---|
| **Infants under the age of 6 months** | Not eligible | Not eligible | Not eligible |
| **Individuals 6 months up to and including 8 years of age who HAVE NOT received influenza vaccine in a previous season:** | 0.5 mL IM | Not eligible | 2 doses, 4 weeks apart |
| **Individuals 6 months up to and including 8 years of age who HAVE received influenza vaccine in a previous season:** | 0.5 mL IM | Not eligible | 1 dose |
| **Individuals 9 to 64 years of age:** | 0.5 mL IM | Not eligible | 1 dose |
| **Individuals 65 years of age and older:** | 0.5 mL IM | 0.7 mL IM | 1 dose of either QIV or QIV HD (high dose should be offered as first option) |

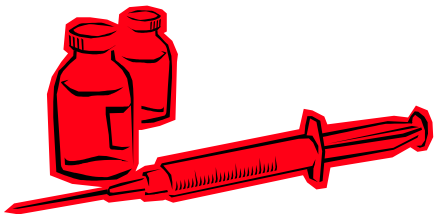
# Influenza Vaccine

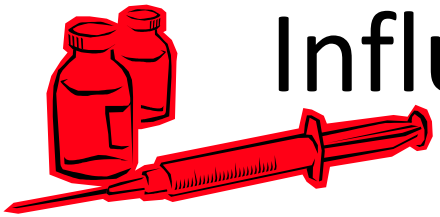
- Multi-dose vials and prefilled syringes must be shaken well before each dose:
  - will be clear to slightly off white suspension.

- Multi-dose vials:  discard 28 days after first puncture into the vial.

- Do not freeze.  Protect from light.

MDV = Multi-Dose Vial; PFS = Pre-filled Syringe

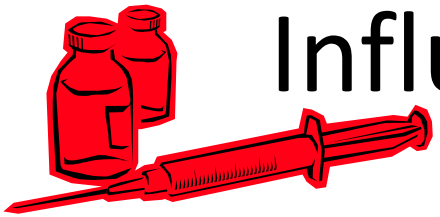




# Influenza Vaccine Reactions

Side effects from the vaccine tend to be mild and go away in a few days. They include:

- Redness, swelling, bruising, or feeling sore at the injection site
- Crying, feeling tired, or getting upset
- Headache
- Fever or chills
- Body aches or sore joints
- Loss of appetite
- Nausea, stomach pain, vomiting, loose stool
- Sore throat, cough or runny nose



# Influenza Vaccine Reactions

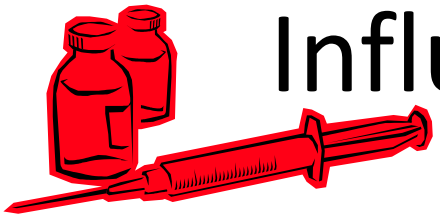
**Uncommon:**

- Lymphadenopathy, dizziness, cough, rash, upper respiratory tract infection, injection site pruritus.

**Rare:**

- Anaphylaxis, allergic reaction, Guillain Barré Syndrome (GBS), oculo-respiratory syndrome (ORS).

- As with any immunization, unexpected or unusual side effects can occur. Refer to product monograph for more detailed information.



# Influenza Vaccine Reactions

- Fluzone™ HD (high dose):
  - Injection site and systemic reactions more frequent with high dose vaccines
    - Higher rates of malaise, myalgia and moderate to severe fever
    - Most systemic reactions are mild and resolve within 3 days.
    - Severe adverse events are rare and similar to standard dose vaccines

# Influenza Vaccine **Contraindications**

- Infants under 6 months of age cannot receive the vaccine
- Anaphylactic or allergic reaction to a previous dose of influenza vaccine or to any constituent of the vaccine
- Known hypersensitivity to any component of the vaccine -excluding eggs.
- Individuals who developed Guillain Barré Syndrome (GBS) within 6 weeks of previous influenza immunization.

# Influenza Vaccine Precautions


NACI states:

- Egg allergy is NOT a contraindication for influenza immunization. Individuals severely allergic to eggs should be monitored for 30 minutes following immunization.
- Egg-allergic individuals may be vaccinated against influenza using any appropriate product without prior influenza vaccine skin test and without any particular consideration, including immunization setting.

***2023 NACI Statement: List 1 section II***

# Vaccine Deferral


- Vaccine should be deferred for individuals presenting with serious acute febrile illness
    - Recommend to be immunized when symptoms have resolved.
- Vaccine <u>can</u> be safely given to:
  - Individual with mild acute illness, with or without fever
  - Individuals recovering from illness or who are taking antibiotics or antivirals (eg. Tamiflu)

# GBS, ORS AND AEFI REPORTING

# 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

**It is recommended that you DO NOT provide influenza immunization to people who have been diagnosed with GBS within 6 weeks of a previous influenza 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:

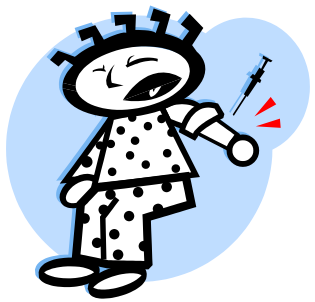
- Risk/benefit
- Severity of symptoms as perceived by the individual who experienced the symptoms

**Contact the CDC Team to have MOH review.**

# Adverse Reaction Reporting

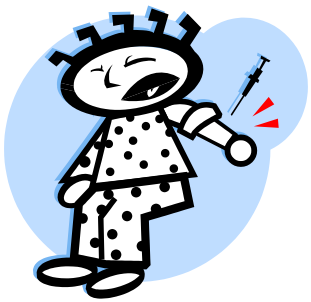
**Local reactions** are reportable if they have:

- 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.

# PNEUMOCOCCAL DISEASE AND VACCINES


# Why is Pneumo-Polysaccharide (Pneumo-P) Important?

- Protects against 23 common types of *Streptococcus pneumoniae* that can cause bacterial pneumonia and other serious infections like bacteremia and meningitis
- Vaccine offered to certain groups of individuals who are more at risk of serious illness
- Bacteria becoming resistant to some antibiotics
- Vaccine effectiveness related to age and immune competency of individual immunized
  - Only protects against serotypes included in vaccine
  - Vaccine is 60 – 70% effective in preventing invasive pneumococcal disease (IPD); >80% develop antibodies.

# Recommended Pneumo-P Recipients

**Routine:**

Those 65 years of age and older, ***regardless of previous Pneumo-P*** (minimum spacing:  5 years)

**Medically at Risk:**

- Individuals 24 months up to and including 64 years of age with chronic conditions.
- Individuals 24 months up to and including 64 years of age in high risk settings:
  - Homeless/shelters
  - Long term care settings
  - Alcoholism and Illicit injection drug use
  - Lengthy list…

# Recommended Pneumo-P Recipients

- A one-time reinforcing dose of Pneumo-P is recommended ONLY for individuals at highest risk of invasive pneumococcal disease.
  - See current pneumococcal biological pages for details
  - This one time dose is given 5 years after initial dose
- Individuals 65 years and older should receive one dose of Pneumo-P regardless of # of previous doses
  - Ensure any dose is at least 5 years after any previous dose

# Polysaccharide Pneumococcal Vaccine

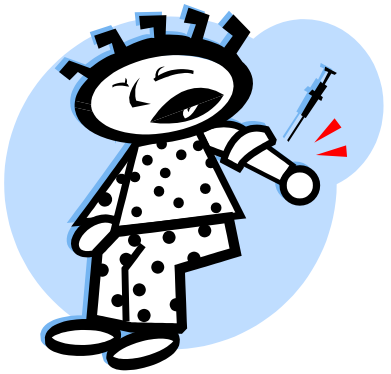
Product used:  Pneumovax 23®, produced by Merck

- Pneumo-P can be administered either SC or IM, but it is recommended to use IM in deltoid.

- FLU and Pneumo-P can be administered during the same visit; using separate syringes at different sites

# Pneumo-P Reactions

- Very common:
  - Injection site soreness, redness and swelling
- Common:
  - Fever > 38.5
  - Headache, malaise, chills
- Rare:
  - Large amount of swelling and pain
  - Nausea and vomiting
  - General rash



# Pneumo-P **Contraindications**


- Children less than 24 months of age
- Known sensitivity to any vaccine component
- History of anaphylactic reaction to any previous dose of vaccine
- Special considerations need to be given to clients undergoing splenectomies, transplants or immunosuppressive therapy. Discuss with CDC team.

# A Quick Word about Pneumococcal 13-valent Conjugate Vaccine (Prevnar® 13)

- Part of the routine child immunization schedule
- Adults High Risk for IPD are eligible for a dose
  - Eg. HIV infection, Cancers, Immunosuppressive Txs.
  - See Biological Page for complete list of indications.
- If a Prevnar®13 dose is indicated:
  - Give minimum of 8 weeks before Pneumo-P
  - If Pneumo-P was given 1st, must wait 1 yr before giving.

# A Quick Word about Pneu-C-20 Vaccine

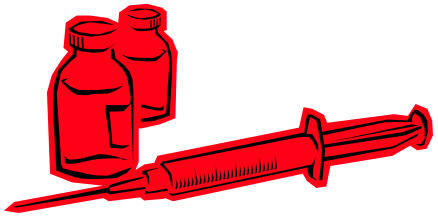
- Authorized in Canada for adults (NACI 2023-02-24 statement)
- Available for purchase in pharmacies ($150/ dose)
- Not part of Alberta Immunization Program
- Feel free to discuss with FNIHB CDC team if your client has a documented dose in Netcare

# VACCINE MANAGEMENT

# Vaccine Management

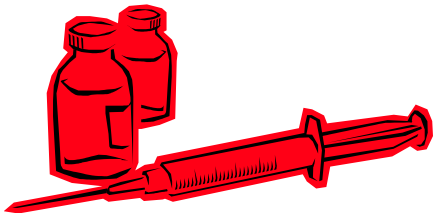
Communicate with your vaccine depot regarding influenza vaccine ordering and delivery schedules.

- # of doses shipped are based on doses administered last year
- Add influenza doses into AVI inventory as soon as received
- Reconcile in AVI Every Monday before 21:00h (9PM)



# Vaccine Management

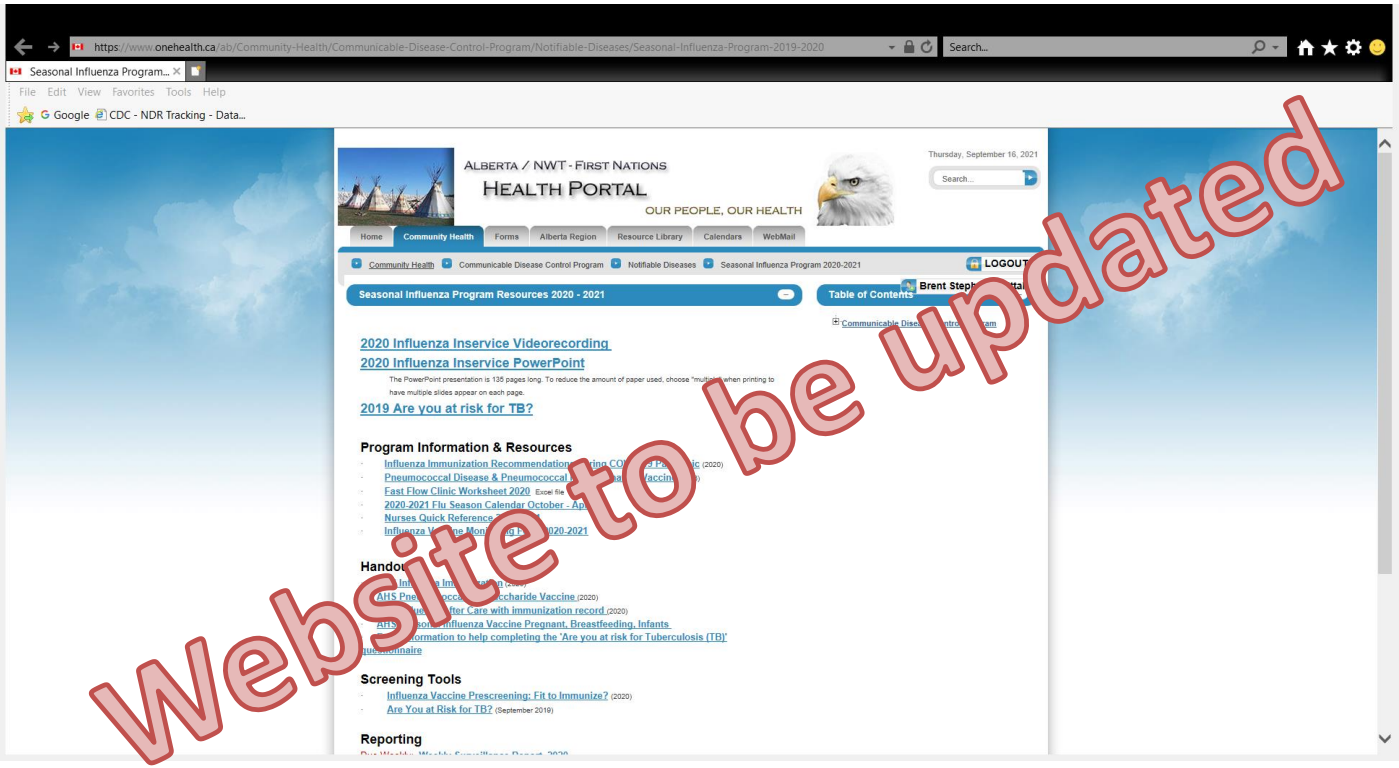
- Store at +2°C to +8°C in original packaging. Do not freeze
- All multidose vials must be dated upon opening
- Check expiry date of all products administering
- Communicate use of nearly expired vials to other staff members
- Vaccine should be withdrawn from the vial by the immunizer administering the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



# PROGRAM INFORMATION

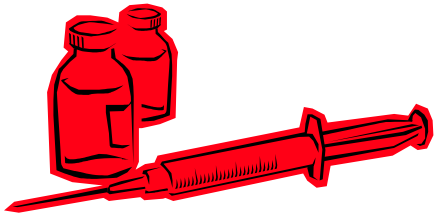
# Program Information

General resources will be in the Influenza section on OneHealth.



# IMMUNIZATION

# Immunization



**October 2, 2023/when vaccine received:**

Soft roll out – not advertised:

- 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 16, 2023:**

- Advertised Influenza vaccine clinics can begin.

**Pneumo-P** is offered throughout the year and can be given at same time as influenza vaccine

# 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:
  - Influenza Program resources on OneHealth
  - Anaphylaxis Module
  - Best Practices:  Vaccine Management

# Who Can Immunize

Following this presentation:

- RNs (public health and home care) and NPs:
  - ***can*** provide Influenza and/or Pneumo-P immunizations for eligible clients ***of all age groups*** if they have the knowledge, skills, and competence to administer the vaccine
- LPNs ***can*** provide Influenza and/or Pneumo-P immunizations for 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. *(see next slides)*

# Who Can Immunize

**LPNs and Immunization:**

The Council of the College of Licensed Practical Nurses of Alberta (CLPNA) updated their policy *"Practice and Education Requirements for Restricted Activities and Advanced Practice"* effective February 1, 2020.

- Immunization no longer requires Registrar authorization and authorization will not be noted on the practice permit.
- Any LPN who graduates in Alberta after June 2022 will have education on administering immunizations as part of their diploma program.

# Who Can Immunize

**Guidance for current LPNs:**

- LPNs who have “Immunization Specialty” on their practice permit:
  - May continue to administer vaccines without need for further education/training.
- LPNs who do NOT have “Immunization Specialty” on their practice permit:
  - Must take additional training/education prior to administering immunizations
  - CLPNA website has a module on administering immunizations: available to members at no cost.

**Note: Contact CLNPA if more information or guidance is needed.**

# Who Can Immunize

**LPNs and Immunization:**

LPNs who want to provide routine immunizations in addition to influenza and Pneumo-P should contact the FNIHB Nursing Education Team to review the process and requirements.

Nursing Education Team email: santepubliquedgspniab-publichealthfnihbab@sac-isc.gc.ca

# 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

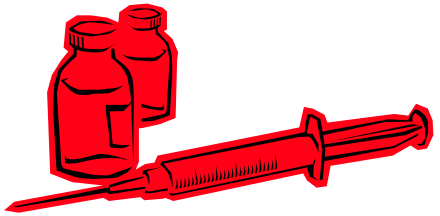
- Administering vaccines falls within Authorized Restricted Activities for PCP and ACP.

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 Re-certification Program* policy and guidelines for primary care and advanced care paramedics.
  - Attending or viewing the *Annual Influenza Program Overview* is part of the requirement

# Immunization Process

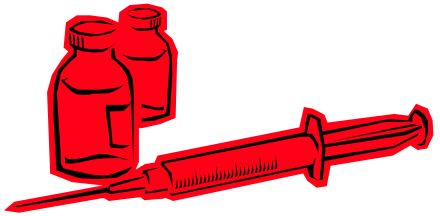


Fit to immunize:

- The immunizer will:
  - Assess the need for immunization
  - Confirm the client has not received a dose of influenza vaccine in the 2023-2024 season
  - Complete a fit to immunize assessment
    - Health status today
    - History of allergies
    - Previous reactions
    - Contraindications
    - Chronic illness/medications
    - Pregnancy

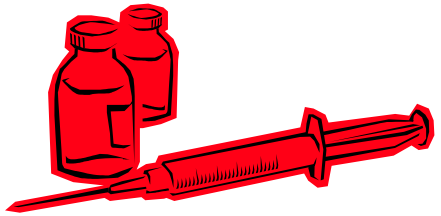
Resource:
"Influenza Vaccine Pre-Screening" tool

# Immunization Process



- Must obtain “informed consent”
  - Risks and benefits of influenza vaccine (and Pneumo-P) should be discussed prior to vaccination, as well as the risks of not getting immunized
  - Do not need signature if the individual presents at a “flu clinic” and bares injection site
  - Children presenting without parent/guardian will need signed consent form or verbal consent from the parent/guardian
  - Follow residential facility consent process when providing immunization in care facilities

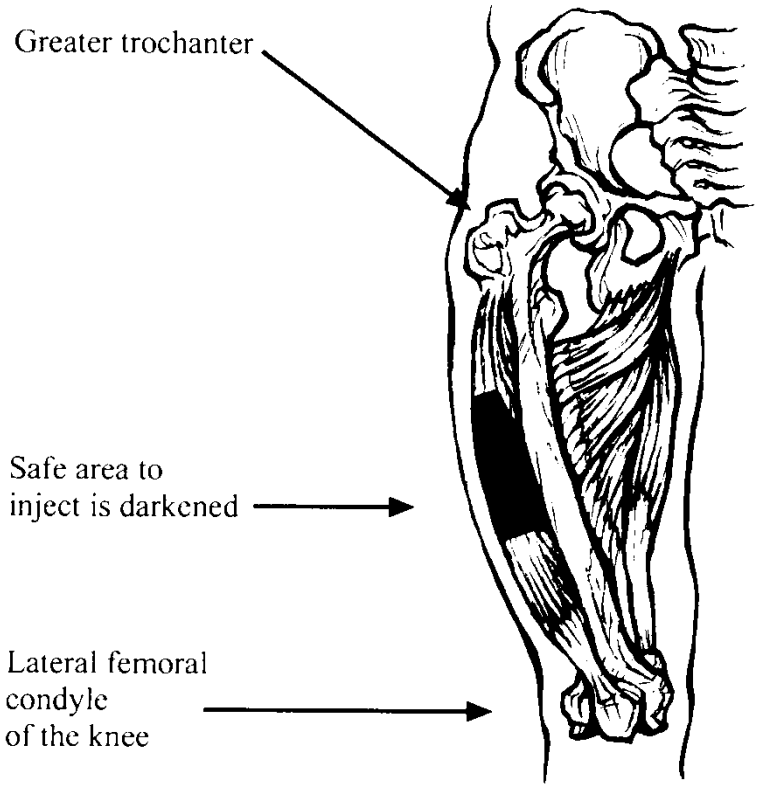
# Intramuscular Injections



## Children < 12 months old

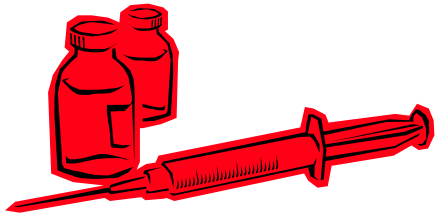
- 3 mL syringe
- 25G 1” needle
- insert at 90 degree angle
- vastus lateralis - middle third of anterior thigh and slightly lateral to the midline

Note: This site can be used for children older than 12 months of age with inadequate deltoid muscle mass.




Vastus Lateralis Site

# Intramuscular Injections

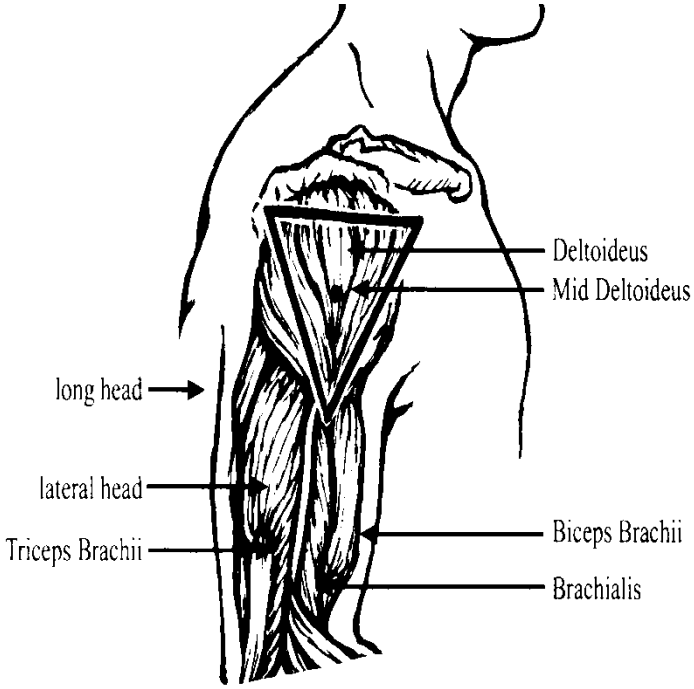


## Children ≥ 12 months old

- 3 mL syringe
- 25G  1” needle
- insert at 90 degree angle
- mid portion of deltoid

## Adults

- 3 mL syringe
- 25G - 1” to 1½” needle depending on muscle mass and adipose tissue
- insert at 90 degree angle
- mid portion of deltoid



Deltoid Site

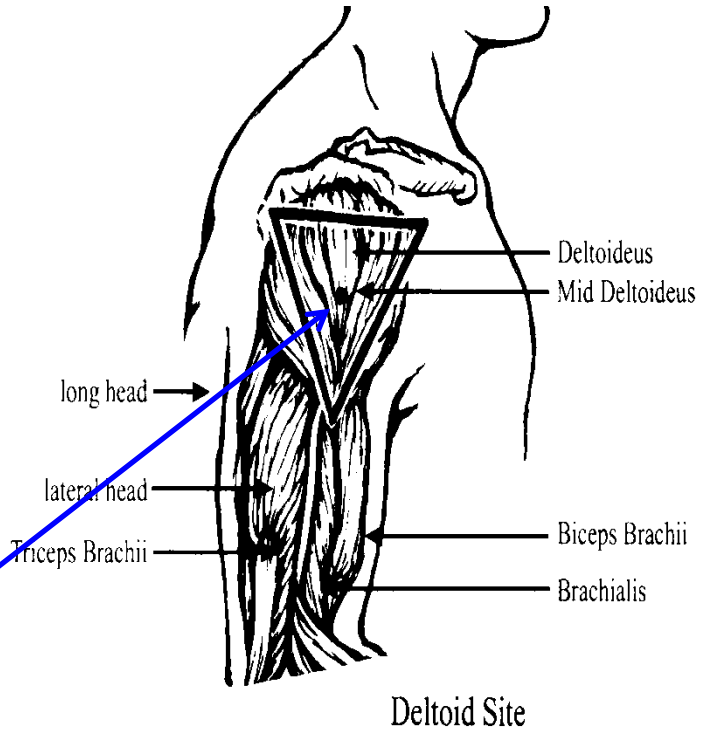
# Importance of Accurate Land-marking

Shoulder Injury Related to Vaccine Administration:

- Sequelae of immune response to direct intracapsular injection
- Typical History/Symptoms:
  - Absence of prior shoulder dysfunction
  - Rapid onset of pain
  - Limited range of motion
  - Persists weeks/months

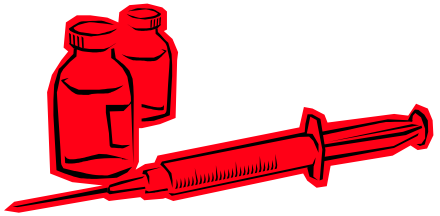
✓ **Ensure correct needle length is used, correct depth**

✓ **Ensure site of injection avoids the top 1/3 of deltoid**




Applied Radiology, 2014;43(12):30 – 31 "Shoulder Injury Related to Vaccine Administration."
http://www.medscape.com/viewarticle/837089

# Intramuscular Injections



**Women with history of mastectomy, lumpectomy or other breast surgery:**

- Single Mastectomy:
  - One vaccine: give IM in arm opposite to mastectomy.
  - Two vaccines: give both IM in arm opposite mastectomy with a minimum of 1” apart.

- Double mastectomy:
  - One vaccine: give IM in Vastus Lateralis.
  - Two vaccines: give both IM in Vastus Lateralis with a minimum spacing of 1” apart.

- Discard all influenza vaccine and influenza resources from previous years.
- All 2022-2023 flu vaccine expired at end of June.
- Reconcile wasted vaccine in AVI before receiving new product.

Resource:  Anaphylaxis Guidelines

**Everyone involved in immunization must review the Guidelines for the Management of Anaphylaxis Related to Immunizations document.**

# ANAPHYLAXIS AND FAINTING

# Anaphylaxis

- Potentially life threatening allergic reaction
- Very rare (about 1 per 1,000,000 doses) but should be anticipated with every client
- Pre-immunization screening can prevent episodes
- Every immunizer should be familiar with the symptoms of anaphylaxis and be ready to initiate appropriate interventions
- Most reactions begin within 15 minutes of immunization

- All clients should be encouraged to wait 15 minutes after immunization.
  - Clients with known anaphylactic allergies, and clients with severe egg allergies should be monitored for 30 minutes after immunization

# Anaphylaxis Management

- ***All immunizers must review Anaphylaxis Guidance in the:***
  a. Canadian Immunization Guide available on-line
     - Part 2: Vaccine Safety
     - Anaphylaxis and other Acute Reactions following Vaccination
  b. ISC CDC Guidelines for Management of Anaphylaxis – on OneHealth

# Anaphylaxis Management

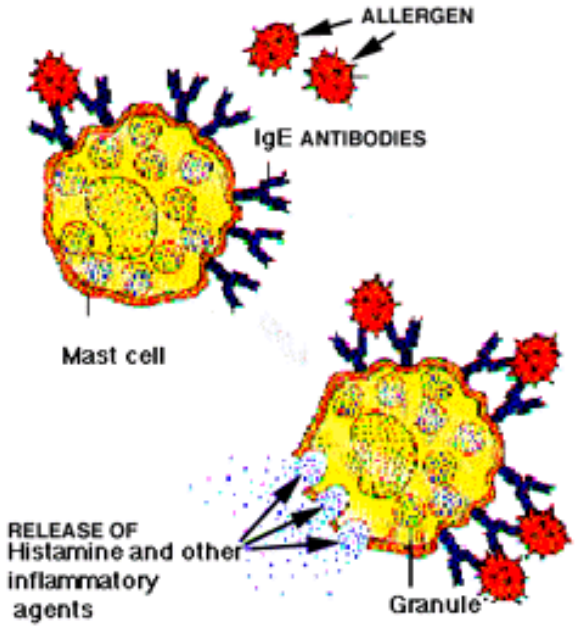
- Immunization related anaphylaxis protocol has NOT Changed.
  - Reminder that oral Benadryl is only to be used in High Alert situations.

- The epinephrine auto-injectors provided to the health centre (pediatric and adult versions) are for use as per the “Protocol For Management of Non-Immunization Anaphylaxis” ONLY.

# Quick Anaphylaxis Review

**A quick & excessive release of Histamine causes:**

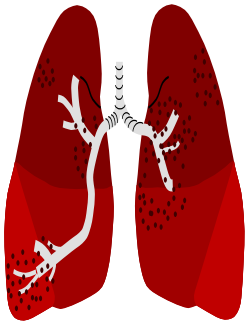
- Plasma to leave capillaries and enter tissues
  →++ swelling, trouble breathing
- Vasodilation of capillaries and arterioles
  →low blood pressure
- Smooth muscle contraction
  →trouble breathing, GI problems
- Increased mucous production
  →trouble breathing



# Quick Anaphylaxis Review

## Respiratory:

- dyspnea - wheezing - sneezing
- choking - drooling
- cyanosis – angioedema - tightness in throat/chest



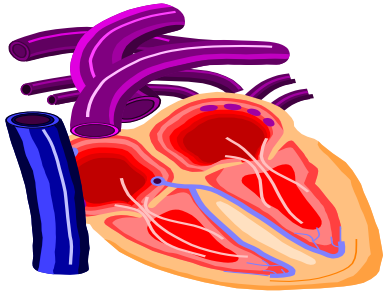
## Dermatologic (skin):

- urticaria - erythema - pruritus
- flushing - pale/grey - facial swelling
- tingling of mouth or face followed by a feeling of warmth

# Quick Anaphylaxis Review

**Vascular Collapse (cardiovascular)**

- rapidly falling blood pressure
- sweating
- rapid, thready pulse
- a feeling of uneasiness, restlessness or anxiety
- weakness or dizziness
- throbbing in the ears or a headache



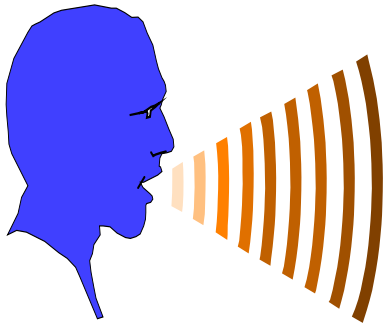
**Gastrointestinal:**

- nausea, vomiting
- diarrhea
- abdominal cramps

# Anaphylactic shock intervention

**The Initial Response …**

- Call for help
- Lie the client on his/her back with feet elevated, if possible
- Loosen restrictive clothing around the neck
- Establish an adequate airway
- Note the time
- Initiate anaphylaxis protocol



# What would you do?

**Would you give this child epinephrine? Why or why not?**

***If in doubt, give!***

Failure to administer epinephrine promptly is more dangerous than administering it in a situation where anaphylaxis is not truly present.

# Fainting after Immunization

- Also known as **syncope or vasovagal syncope**
  - Triggered by a stimulus (anxiety) that causes an exaggerated response in the part of the nervous system that regulates involuntary body functions (heart rate, blood flow)
  - When a stimulus triggers an exaggerated response, both heart rate and blood pressure drop, quickly reducing blood flow to the brain and leading to loss of consciousness

# Fainting after Immunization

- In about 25% of cases, reduced blood flow can result in jerking movements that resemble seizures
  - More common when fainting occurs soon after immunization and disappears when consciousness is regained

- Clients fainting due to vasovagal syncope recover quickly, usually within seconds or a few minutes

# Symptoms of Fainting

**Musculoskeletal:**
- Muscles relaxed
- Weakness
- Incontinence (rare)
- Clonic jerks of limbs and face

**Respiratory**
- Normal or yawning

**Dermatologic**
- Pallor/grey colour – sweating

**Gastrointestinal**
- Vomiting, nausea

**Cardiovascular**
- Hypotension, Slow weak pulse
- Ringing in ears

**Neurological**
- Light headedness, dizziness
- Spots before the eyes
- Dazed
- Unconsciousness

# Facts about Fainting

- Clear incidence peak in age 10 to 19 years of age, with smaller peak at 4 to 6 years
  - After the age of 20 years, the incidence decreases
- 57.5% occur in females
- Incidence of fainting is under-reported
- Most cases occur within 5-15 minutes of immunization
- Fainting can result in head trauma if a client falls
  - The goal is to prevent falls

# Tips to Prevent Fainting

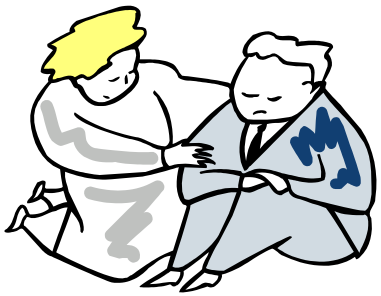
- ✓ Administer vaccine while client is seated
- ✓ Maintain a calm and confident manner
- ✓ Observe anxious clients while seated until anxiety has resolved after immunization
- ✓ Have clients with a history of fainting lie down prior to administering the vaccine
- ✓ Clients with pre-syncopal symptoms *(such as dizziness, anxiety, pallor, perspiration, trembling, or cool clammy skin)* should sit or lie down until symptoms resolve

# Assisting Clients after Fainting

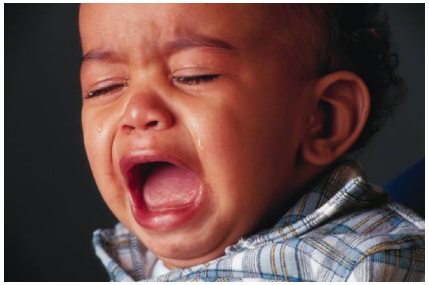
- Assist the client to lay down with feet elevated
- Ensure the client's airway is open (ABCs)
- Monitor for signs of allergic reaction
- Call for assistance if needed
- Cover client with blanket for warmth if available
- Wipe client's forehead with cool damp cloth
- Can offer fluids
- Have the client resume a standing position in stages (sit, stand, walk)
- Observe the client until the symptoms have resolved

# Anxiety Spells

- Symptoms:
  - Fearful, pale, diaphoretic
  - Complains of light headedness, dizziness, numbness, and tingling of face and extremities
  - Hyperventilation
- Treatment
  - Reassurance
  - Instruct to relax and breathe slowly



# Breath Holding



- Occurs in young children when upset
  - Suddenly become quiet but still very agitated
  - Facial flushing and perioral cyanosis
  - Often ends with resumption of crying, or a brief period of unconsciousness during which time breathing resumes
- Treatment:
  - reassurance

# INFECTION PREVENTION AND CONTROL

# Infection Prevention and Control

- Hand hygiene is critical
  - Must be done between each client
    - ✓*Waterless hand gel*
  - Hand creams to maintain skin integrity
- Gloves are ***not*** recommended during immunizations
- "Respiratory Etiquette" protocol.
  - coughing/sneezing into tissue or upper sleeve
  - providing masks PRN

# Infection Prevention and Control

- Vaccine Administration
  - Ensure a clean workspace
    - Clean surface at start and end of day
    - Establish clean work area (blue pad, professional towel, etc.)
      - Avoid placing papers, pens in this area


- Sharps management
  - Use safety syringes and needles
  - Sharps disposal at point of contact

# Vaccine Clinic Guidelines

- Key Components:
  - Screening:
    - self-screen for all staff
    - Process to screen clients (appointments, prior to entry)
  - Physical Distancing:
    - Scheduled appointments or mass immunization clinic approach
    - Limit number of clients at any one time (including 15 minute post immunization wait time)
    - One way traffic flow, i.e: entry→ waiting area→ immunization station → post immunization waiting area → exit.

# Vaccine Clinic Guidelines

- Infection Prevention and Control:
  - Hand hygiene:  clients must perform hand hygiene upon entry to site
  - Environmental cleaning:  cleaning of high touch areas at least twice daily, or when dirty.
  - Mandatory mask use discontinued by MOH July 2023
    - Have masks available to people mildly symptomatic or who otherwise choose to wear one.

# Vaccine Clinic Guidelines

- Other recommendations:
  - Minimize large groups
    - i.e. one immunizer : one person
  - Maintain list of staff/clients for each clinic
  - Signage to help with instructions
  - Consider various clinic formats in accordance with available resources/community context, e.g.:
    - Drive through immunization clinics
    - Immunize during home visits
    - Outreach/mobile clinics

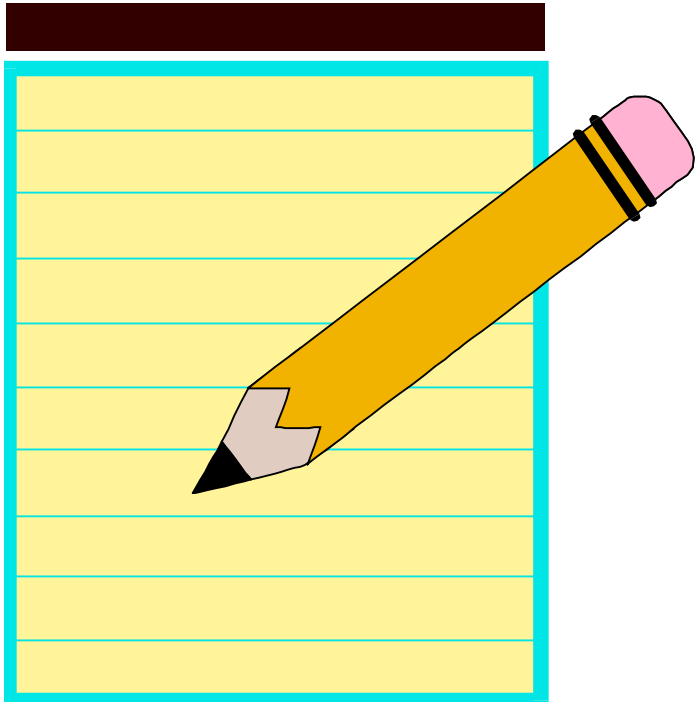
PHAC 2020: “Guidance for Influenza Vaccine Delivery in the presence of COVID-19”.

# Vaccine Clinic Guidelines

The FNIHB August 21, 2020 guidance document also includes recommendations for:

- Immunization clinics in Community Health Centres/Nursing Stations
- Immunizations during Home Care Visits or Door-to-Door campaigns
- Parking lot or drive through clinics
- Outreach or mobile clinics
- School-based clinics

# Recording & Data Collection



# Overall Objectives

- Immunization Coverage:
  - ***80***% of all persons ≥ 65 years of age
  - ***95***% residents of LTC facilities
  - ***80***% of HCWs
  - ***80***% of children 6 to 59 months of age
  - ***100***% assessment for Pneumo-P eligibility with all individuals presenting for influenza vaccine
- ***100***% TB assessment for chronically ill adults
  - See TB screening algorithms

# Alberta Health Reason Code Changes

- Instead of the previous list, one reason code is in use for 2023-2024:
  - Routine Recommended Immunization - Code 50

# Immunization Reporting Requirements

- Weekly clinic summary of influenza doses administered
  - To be submitted by Monday, noon, for the previous week's activity ***if not*** submitting through CHIP.
- Adverse Reactions:
  - Submit reportable reactions *to Regional CDC* as they occur
  - Reminder to monitor for unexpected AEs.

**Documents will be updated and placed on OneHealth**

# Immunization Documentation Requirements

**Information to include when charting**:

- Client demographic information
  - Full name, PHN, DOB, gender, full address
- Vaccine name, lot number
- Dosage administered, dose number
- Site of injection, route of administration
- Immunizer name, designation and signature
- Date of immunization

# Influenza Immunization Record

- An electronic form is available:
  - It can be filled by typing information in, then printing, or
  - It can be printed then filled manually by writing the information on it
  - It does not specifically include Pneumo-P
    - use “other” section on record
    - Document dose given on immunization record

Alberta Health Services

Site/Clinic Location _____

## 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 |
|---|---|---|
| | | ☐ New to Alberta ☐ 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 # _____

PNEUMO-P

Dose ☐ Annual ☐ 1 of 2 ☐ 2 of 2

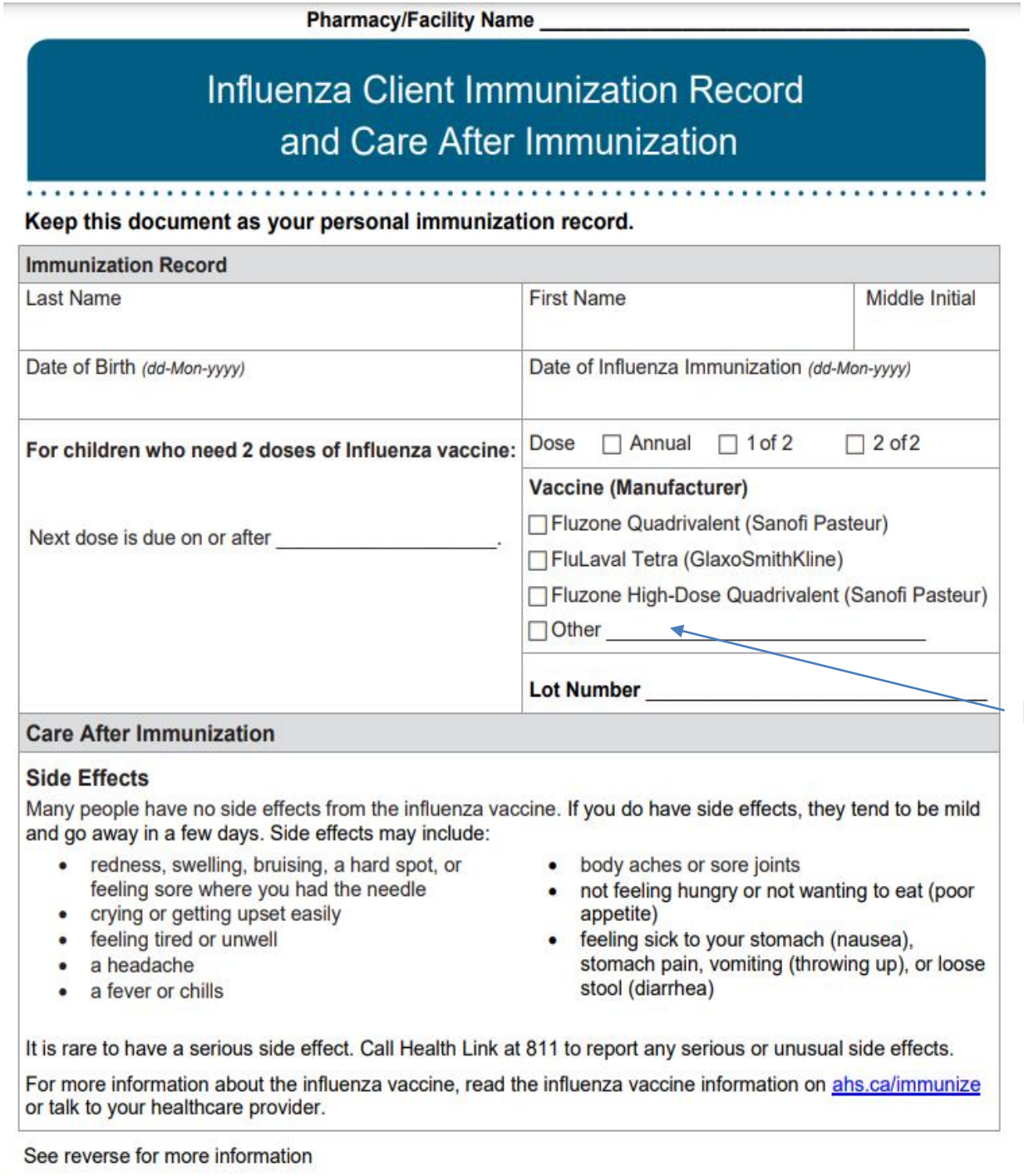
Site **Arm** ☐ Left ☐ Right
**Leg** ☐ Left ☐ Right

| **Date Vaccine Given** *(dd-Mon-yyyy)* | **Time Vaccine Given** *(24 hrs)* |
|---|---|
| | |

| Immunizer's Full Name *(first, last)* | Designation |
|---|---|
| | |

| Signature | Meditech ID Number |
|---|---|
| | |

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



Pharmacy/Facility Name _____

# Influenza Client Immunization Record and Care After Immunization

**Keep this document as your personal immunization record.**

| **Immunization Record** | | |
|---|---|---|
| Last Name | First Name | Middle Initial |
| Date of Birth *(dd-Mon-yyyy)* | Date of Influenza Immunization *(dd-Mon-yyyy)* | |
| **For children who need 2 doses of Influenza vaccine:** | Dose ☐ Annual ☐ 1 of 2 ☐ 2 of 2 | |
| Next dose is due on or after _____. | **Vaccine (Manufacturer)**<br>☐ Fluzone Quadrivalent (Sanofi Pasteur)<br>☐ FluLaval Tetra (GlaxoSmithKline)<br>☐ Fluzone High-Dose Quadrivalent (Sanofi Pasteur)<br>☐ 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:

- 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
- 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.

See reverse for more information

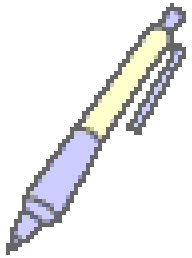
PNEUMO-P

# 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

- 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.

**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-abcdcteam@sac-isc.gc.ca**

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

Will be updated and placed on OneHealth

Summary of Influenza Immuniza[illegible]s for the week of: _____

Community: _____ Date: _____

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".

# Immunization/Reporting Tools

FNIHB - Alberta Region

## Influenza Vaccination Monitoring Form
### 2022 – 2023 Flu Season

For use in influenza clinics, physician's clinics, home care nursing staff, pharmacists to assist with tracking.

**Vial #** _____ **High Dose:** Y N

**Influenza Vaccine Lot #:** _____ **Format[4]:** MDV PFS **Pneumo-P Vaccine Lot #:** _____

| | Name | DOB | PHN | Date Given | TB Screen (Y/N) | Pneumo-P[2] | | | Influenza | | | Initials[3] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | History of Imm. | Imm. Given Today | Not Eligible | 6 months to 8 years[1] | 9-64 years of age | 65 years and older | |
| 1 | | | | | | | | | 1 2 A | | | |
| 2 | | | | | | | | | 1 2 A | | | |
| 3 | | | | | | | | | 1 2 A | | | |
| 4 | | | | | | | | | 1 2 A | | | |
| 5 | | | | | | | | | 1 2 A | | | |
| 6 | | | | | | | | | 1 2 A | | | |
| 7 | | | | | | | | | 1 2 A | | | |
| 8 | | | | | | | | | 1 2 A | | | |
| 9 | | | | | | | | | 1 2 A | | | |
| 10 | | | | | | | | | 1 2 A | | | |
| 11 | | | | | | | | | 1 2 A | | | |

Will be updated and placed on OneHealth

1. For children 6 months through 8 years of age, please indicate the appropriate dose for each child. Circle "1" or "2" if this is the first year they are receiving influenza vaccine to indicate which dose in the series was given (i.e. 1 of 2=1; 2 of 2=2). If they have received influenza vaccine in a previous season and only require one dose this year, circle "A" for annual.
2. Individuals eligible for Pneumo-P vaccine should be assessed as they present. Code as follows: *History of Imm* = if they have received Pneumo-P immunization in the past and are not due; *Imm given today* = if Pneumo-P given "today" (date included in "Date Given" column); *Refused* and *Not- eligible* = self explanatory. ***See Pneumococcal Polysaccharide Vaccine Eligibility Criteria Reference.***
3. The initials of the person administering the vaccine – ensure that a register of initials is maintained.
4. MDV = multi-dose vial; PFS = prefilled syringe. Please circle appropriate format.

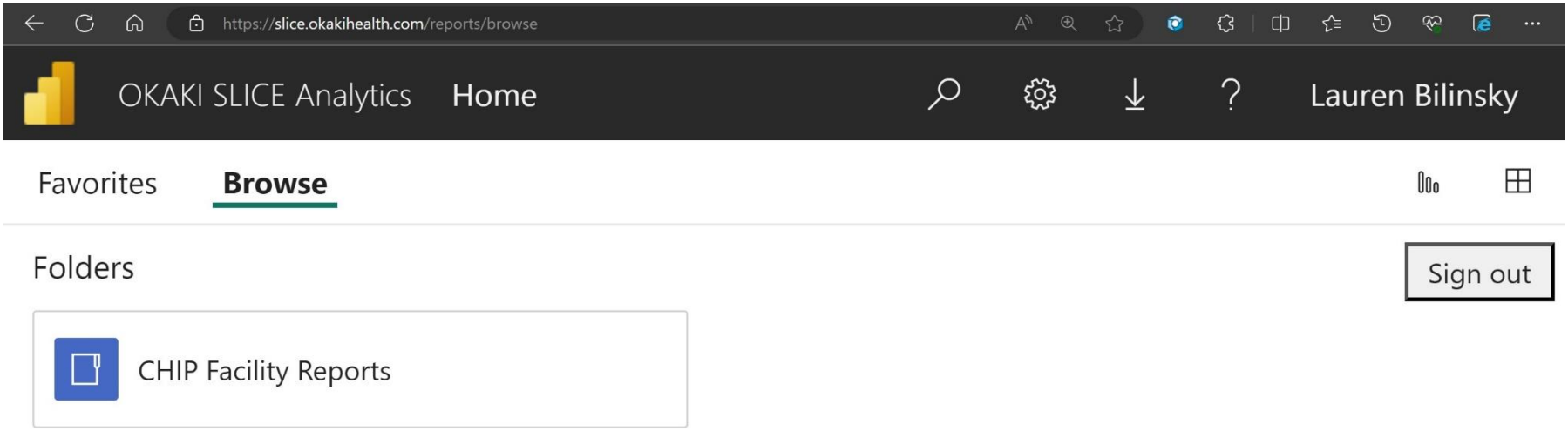
October 2022

**Optional resource – do not submit to FNIHB AB Region**

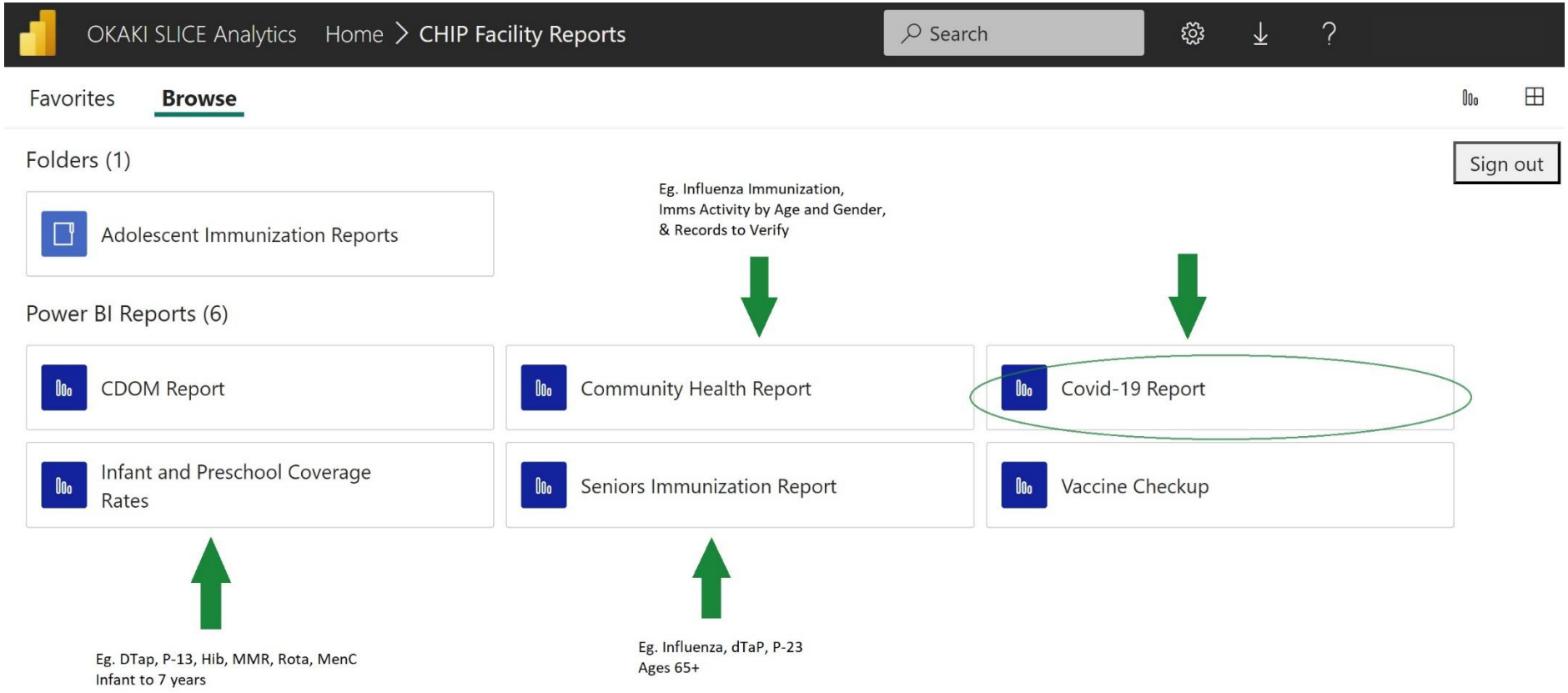
# OKAKI/CHIP Update for Influenza

- No changes for influenza and pneumococcal vaccine codes
- Privately received vaccines (Prevnar20, adult RSV) being merged into CHIP and Netcare

# Vaccine Tracking through OKAKI/SLICE



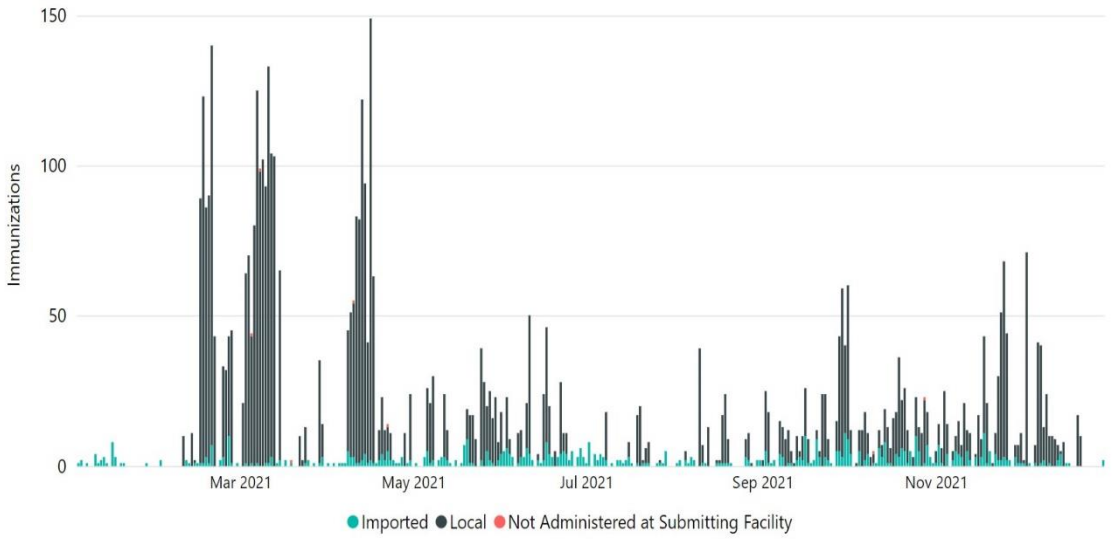
# Vaccine Tracking through OKAKI/SLICE



# Vaccine Tracking through OKAKI/SLICE

File | View | Explore | Refresh | Sign out

## Immunization Activity by Source




## Immunization Activity by Source and Week

| Source | Immunizations |
|---|---|
| Imported | 641 |
| Local | 4762 |
| Not Administered at Submitting Facility | 7 |
| **Total** | **5410** |

***Given outside of CHIP eg. AHS facility***

***Given in this community***

***Given at another CHIP facility ie. another Health Centre or Nursing Station***

Community

Calendar Year: 2021

Age at Immunization: All

Vaccine: All

Reason: All

Gender: All

Source: All

In Stats: All

Deceased: All

Reset Filters

Week starts on Sunday

Imm Activity by Vaccine | Imm Activity by Reason | **Imm Activity by Source** | Cumulative Count by Age Group | Cumulative Count by Reason | Reason Crosstab

# 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

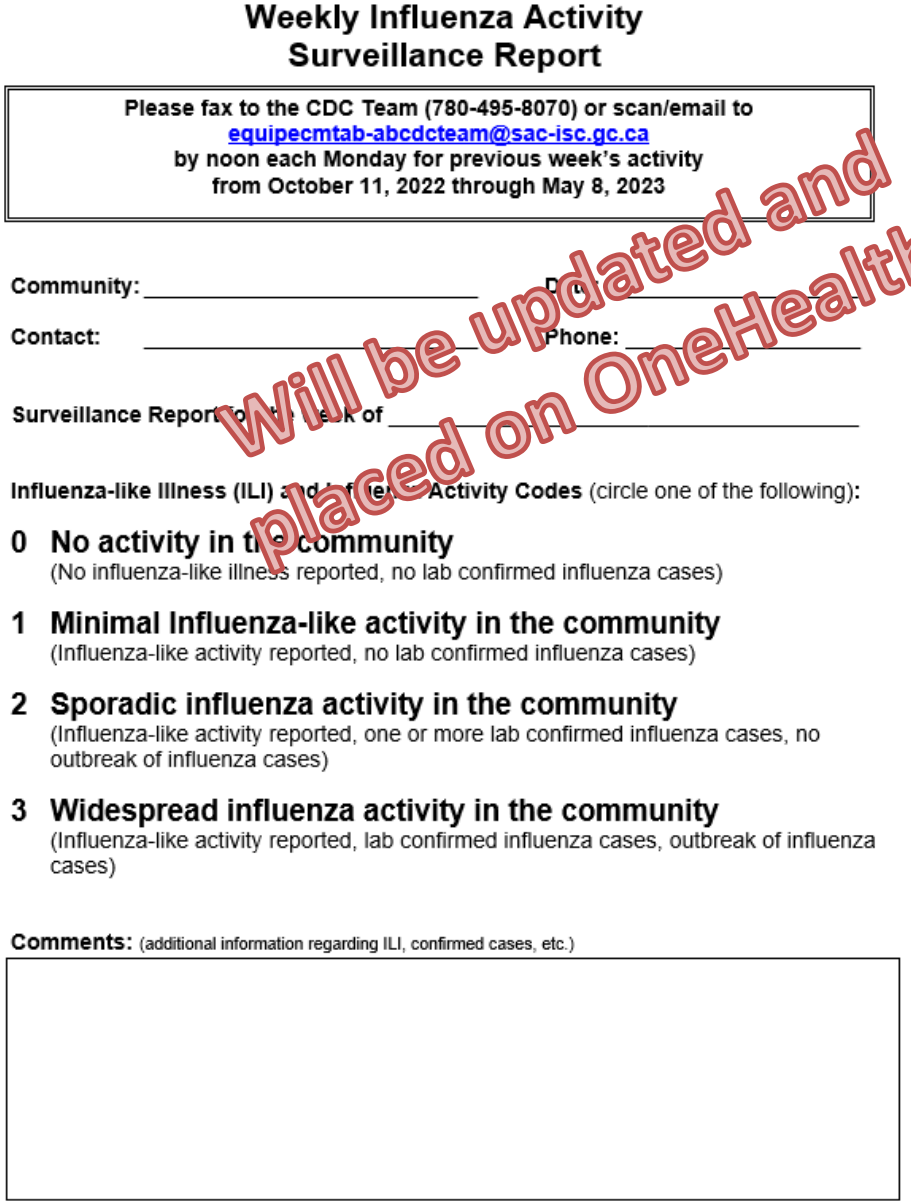
# ILI Definition

- 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 Surveillance Report

- Due Monday noon for the previous week ILI activity:



**Weekly Influenza Activity Surveillance Report**

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

Will be updated and placed on OneHealth

**Community:** _____ **D** _____

**Contact:** _____ **Phone:** _____

**Surveillance Report** **k of** _____

**Influenza-like Illness (ILI) a** **Activity Codes** (circle one of the following):

**0 No activity in t** **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.)

# Surveillance

- Components of Surveillance:
  - ILI activity (no activity, sporadic, widespread)
  - NP swabs
  - Weekly surveillance reports
  - Please call Brent/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 Surveillance

- Begins October 2, 2023 until Spring 2024
  - 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. Christopher Sarin may be the ordering physician
- Optional expanded testing using the GeneXpert machines
  - Influenza A & B, and RSV
  - Require nasal or nasopharyngeal swabbing
  - Dr. Christopher Sarin is to be the ordering physician
  - FNIHB POCT training modules need to be successfully completed prior to engaging in testing

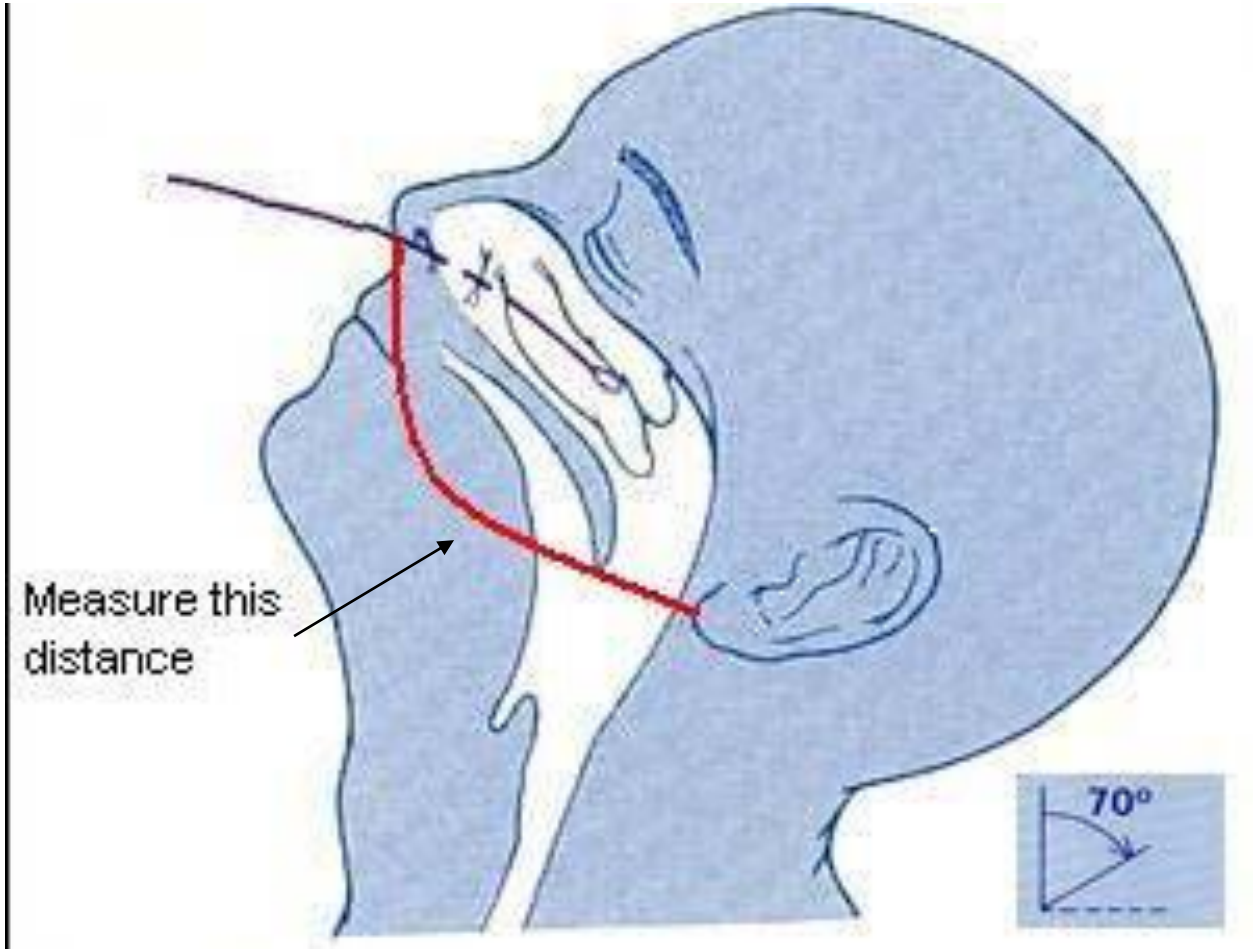
# Influenza Specimen Basics

**Check the quality of the specimen containers before and after collection.**

- Faulty containers
- Contaminated viral transport medium
- Proper capping to avoid leaking
- Expiration dates (usually a 1 year shelf life)
- Label specimen with 2 unique identifiers (name, PHN/ULI, specimen site)
- Keep specimens refrigerated and send to lab asap

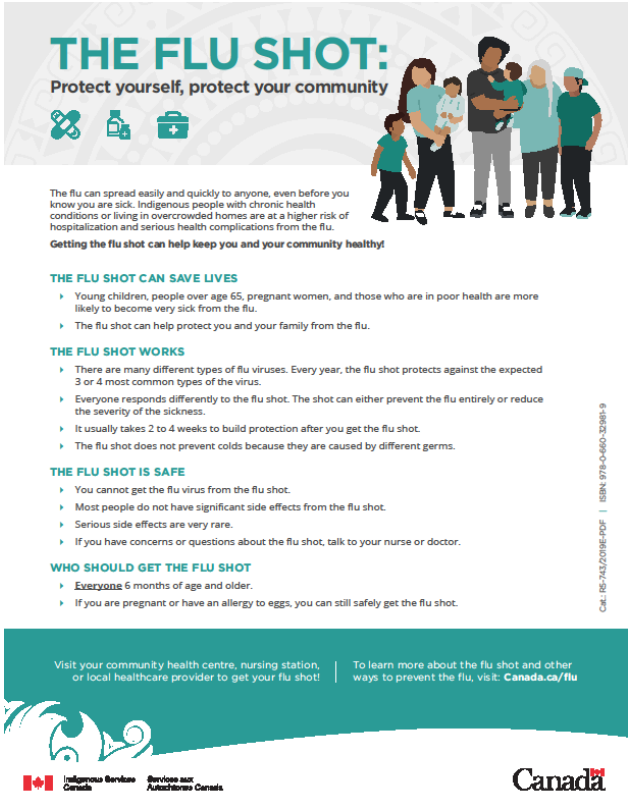
# Nasopharyngeal Swabs

**http://www.provlab.ab.ca/education.htm**




# PDF Fact Sheets/Posters available for printing at this GOC Website






**https://www.sac-isc.gc.ca/eng/1570037443226/1570037485313**

# PDF Fact Sheets/Posters available for printing at this AH Website



**https://www.albertahealthservices.ca/influenza/Page17625.aspx**

# Toolkit for Promoting Influenza Vaccinations in Communities

- https://www.onehealth.ca/ab/Community-Health/Communicable-Disease-Control-Program/Notifiable-Diseases/Seasonal-Influenza-Program-2019-2020

This toolkit was developed to assist health care providers in:

- Planning campaign messages;
- Locating influenza promotion resources and;
- Providing examples to assist in delivering messaging about vaccinations;
- Providing ideas to promote immunization in communities;
- Providing general messaging to share on social media pages.

# 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.

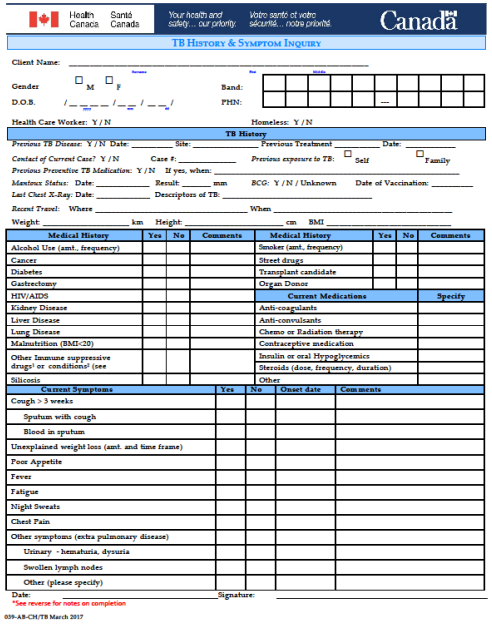
Please list any medications you are taking.

_____
_____
_____
_____
_____
_____

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


TB History & Symptom Inquiry

Client Name:

Gender M F Band:

D.O.B. PHN:

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

TB History

Previous TB Disease: Y / N Date: Site: Previous Treatment Date:

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

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

Mantoux Status: Date: Result: mm BCG: Y / N / Unknown Date of Vaccination:

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

Recent Travel: Where When

Weight: kg Height: cm BMI

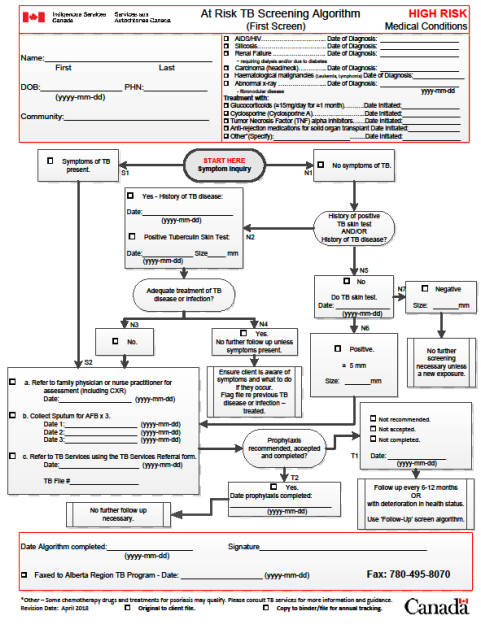
| Medical History | Yes | No | Comments | Medical History | Yes | No | Comments |
|---|---|---|---|---|---|---|---|
| Alcohol Use (amt., frequency) | | | | Smoker (amt., frequency) | | | |
| Cancer | | | | Street drugs | | | |
| Diabetes | | | | Transplant candidate | | | |
| Gastrectomy | | | | Organ Donor | | | |
| HIV/AIDS | | | | Current Medications | | | Specify |
| Kidney Disease | | | | Anti-coagulants | | | |
| Liver Disease | | | | Anti-convulsants | | | |
| Lung Disease | | | | Chemo or Radiation therapy | | | |
| Malnutrition (BMI<20) | | | | Contraceptive medication | | | |
| Other Immune suppressive drugs[1] or conditions[2] (see | | | | Insulin or oral Hypoglycemics | | | |
| | | | | Steroids (dose, frequency, duration) | | | |
| Silicosis | | | | 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:

*See reverse for notes on completion

039-AB-CH/TB March 2017


At Risk TB Screening Algorithm (First Screen) HIGH RISK Medical Conditions

Name: First Last

DOB: (yyyy-mm-dd) PHN:

Community:

Symptoms of TB present. S1

START HERE Symptom Inquiry

No symptoms of TB. N1

Yes - History of TB disease: Date: (yyyy-mm-dd) N2

Positive Tuberculin Skin Test: Date: (yyyy-mm-dd) Size mm

History of positive TB skin test AND/OR History of TB disease?

Adequate treatment of TB disease or infection? N3

No. N4

No further follow up unless symptoms present.

No N5

Do TB skin test. Date: (yyyy-mm-dd) N6

Negative Size: mm

Positive. ≥ 5 mm Size: mm

No further screening necessary unless a new exposure.

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

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

c. Refer to TB Services using the TB Services Referral form. Date: (yyyy-mm-dd) TB File #

Ensure client is aware of symptoms and what to do if they occur. Flag file re previous TB disease or infection – treated.

Prophylaxis recommended, accepted and completed? T1 T2

Not recommended. Not accepted. Not completed. Date: (yyyy-mm-dd)

Yes. Date prophylaxis completed: (yyyy-mm-dd)

No further follow up necessary.

Follow up every 6-12 months. OR with deterioration in health status. Use 'Follow-Up' screen algorithm.

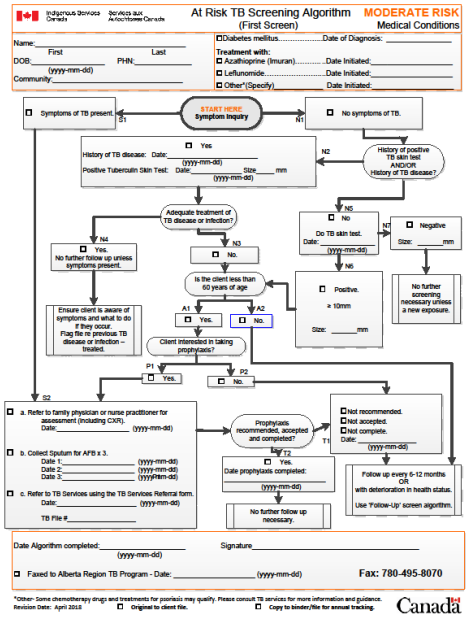
Date Algorithm completed: (yyyy-mm-dd) Signature

Faxed 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.

Canada


At Risk TB Screening Algorithm (First Screen) MODERATE RISK Medical Conditions

Name: First Last

DOB: (yyyy-mm-dd) PHN:

Community:

Diabetes mellitus Date of Diagnosis:

Treatment with: Azathioprine (Imuran) Date Initiated: Leflunomide Date Initiated: Other* (Specify) Date Initiated:

Symptoms of TB present. S1

START HERE Symptom Inquiry

No symptoms of TB. N1

History of TB disease: Date: (yyyy-mm-dd) Yes N2

Positive Tuberculin Skin Test: Date: (yyyy-mm-dd) Size mm

History of positive TB skin test AND/OR History of TB disease?

Adequate treatment of TB disease or infection? N3

No. N4

No further follow up unless symptoms present.

No N5

Do TB skin test. Date: (yyyy-mm-dd) N6

Negative Size: mm

Positive. ≥ 10mm Size: mm

No further screening necessary unless a new exposure.

Is the client less than 60 years of age A1 Yes A2 No.

Ensure client is aware of symptoms and what to do if they occur. Flag file re previous TB disease or infection – treated.

Client interested in taking prophylaxis? P1 Yes P2 No.

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

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

c. Refer to TB Services using the TB Services Referral form. Date: (yyyy-mm-dd) TB File #

Prophylaxis recommended, accepted and completed? T1 T2

Not recommended. Not accepted. Not complete. Date: (yyyy-mm-dd)

Yes. Date prophylaxis completed: (yyyy-mm-dd)

No further follow up necessary.

Follow up every 6-12 months. OR with deterioration in health status. Use 'Follow-Up' screen algorithm.

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

Faxed 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.

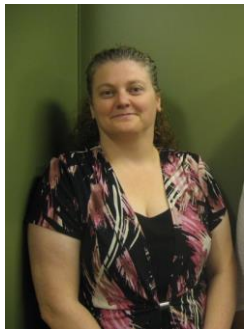
Revision Date: April 2018 Original to client file. Copy to binder/file for annual tracking.

Canada

# TB Queries

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

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



***Andrea Warman***
andrea.warman@canada.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@canada.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 and roll call