New Brunswick Respiratory Season Vaccine Guide

Information for Immunizers

Department of Health
Public Health New Brunswick
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1. GENERAL INFORMATION

1.1 PURPOSE OF THIS DOCUMENT

The purpose of this document is to communicate to all Health Care Professionals administering **Influenza**, **Pneumococcal** and **COVID-19 vaccines** in New Brunswick, the essential technical vaccine information required for the respiratory season.

1.2 RESPONSIBILITIES OF ALL IMMUNIZATION PROVIDERS

All immunizers administering publicly funded vaccine shall be ensure they have the necessary competencies to safety administer Influenza, Pneumococcal and COVID-19 vaccines according to the New Brunswick Immunization Program Guide (NBIPG) document: Immunization Competency Requirements for All Immunization Providers. Immunizers are also responsible to:

- **Report** Adverse Events Following Immunizations (AEFI) to the local Regional Health Authority(RHA) Public Health as per the document: Reporting of Adverse Events Following Immunization in New Brunswick and Reporting Adverse Events Following immunization (Clinic Poster) .
- **Provide** the client with a proof of immunization as per Regulation 2009-136, section 14 under the *Public Health Act*.
- **Manage** the vaccine cold chain and **store** vaccines as per the document: Vaccine Storage and Handling and their Product Monograph.
- **Safely** monitor clients post administration as per the document: Management of Anaphylaxis and other Reactions following immunizations in Non-Hospital Settings.

2. HOW TO ORDER YOUR VACCINES

Each year, distribution is expected to begin in early October with administration to start mid-October. The exact launch date will be announced once vaccine delivery to the province is confirmed.

Although vaccination before the onset of the respiratory season is strongly preferred (in October or early November), vaccine providers should use every opportunity to give any of the vaccines during the current season, even after the disease activity has been documented in the community (ex. after April).

As a vaccinator, carefully review the following table outlining the specific processes for ordering each vaccine individually.

Process for Ordering Vaccines			
Immunization Provider	**Vaccine Type**	**Where to order**	**Delivery Notes**
Health Care Practitioners (HCP) serviced by a sub-depot for routine vaccine deliveries (Physicians, nurse practitioners, midwives, community health centres).	Influenza / Pneumococcal	This group sends their Publicly Funded Vaccine Biologics Order Form to their applicable sub-depots who will then enter orders in the Public Health Information Solution (PHIS) using the Product Requisition.	**Influenza** is distributed from McKesson to sub-depots for pick-up by HCP. **Pneumococcal** is distributed from Central Serum Depot (CSD) to sub-depots for pick-up.
	COVID	This group sends their orders to the Vaccine Operations Centre (VOC) at the following email address voc-opsdesk@gnb.ca.	VOC will advise order details and pick up information via email confirmation
Health Care Practitioners NOT serviced by a sub-depot (Physicians, nurse practitioners, and midwives) in areas	Influenza	This group sends their Publicly Funded Vaccine Biologics Order Form to local Regional Public Health (RPH) Offices as per usual process. The RPH offices enters their orders in PHIS through the Product Requisition.	The product is distributed from McKesson to RPH offices for pickup as per usual process.
	Pneumococcal	Order is placed through Central Serum Depot via the Publicly Funded Vaccine Biologics Order Form	This product is distributed from Central Serum Depot
	COVID	This group sends their orders to the Vaccine Operations Centre (VOC) at the following email address voc-opsdesk@gnb.ca	VOC will advise order details and pick up information via email confirmation
Licensed Nursing Homes and **Non-Licensed Nursing Homes** **Extra Mural Program (EMP)** for in home patients and residents of Adult Residential Facilities (ARF)	Influenza	Nursing Homes (NH) and EMP send orders to the Vaccine Operations Centre at the following email address DHVaccLog@GNB.CA who then enters their orders in PHIS.	The product is distributed from McKesson to NH and EMP offices on the next scheduled delivery day
	COVID	Nursing Homes and EMP send their orders to the Vaccine Operations Centre at the following email address DHVaccLog@GNB.CA.	
	Pneumococcal	Order is placed through Central Serum Depot via the Publicly Funded Vaccine Biologics Order Form	This product is distributed from Central Serum Depot

First Nation (FN) health care practitioners and nurses	Influenza	FN communities send their orders to the Vaccine Operations Centre at the following email address DHVaccLog@GNB.CA who then enter orders in PHIS.	The product is distributed from McKesson to FN on the next scheduled delivery day
	COVID	FN communities sends their orders to the Vaccine Operations Centre at the following email address DHVaccLog@GNB.CA	
	Pneumococcal	Order is placed through Central Serum Depot (CSD) via the following form: Publicly Funded Vaccine Biologics Order Form	The product is distributed from the Central Serum Depot
Public Health (PH)	Influenza / Pneumococcal	PH enter orders directly into PHIS through the Product Requisition.	**Influenza** is distributed from McKesson to PH on the next scheduled delivery day. **Pneumococcal** is distributed from Central Serum Depot.
	COVID	Sends their orders to the Vaccine Operations Centre at the following email address DHVaccLog@GNB.CA	The product is distributed from McKesson to PH on next scheduled delivery day
Sub-depots (Ordering for distribution purposes)	Influenza / Pneumococcal	Sub-depots enter their orders directly into the PHIS through the Product Requisition.	**Influenza** is distributed from McKesson to Sub-Depot on next scheduled delivery day. **Pneumococcal** is distributed from Central Serum Depot.
	COVID	Sends their orders to the Vaccine Operations Centre at the following email address voc-opsdesk@gnb.ca.	VOC will advise order details and pick up information via email Confirmation.
Hospital pharmacies (For administration to inpatients and staff)	Influenza	Sends their orders to the Vaccine Operations Centre at the following email address DHVaccLog@GNB.CA who then enters the orders in PHIS.	The product is distributed from McKesson to Hospital

Mental Health/Addiction institutions and Correctional Facilities	COVID	Sends their orders to the Vaccine Operations Centre at the following email address DHVaccLog@GNB.CA	pharmacies, Mental Health/Addiction institutions and Correctional Facilities
	Pneumococcal	Order is placed through Central Serum Depot via the following form: Publicly Funded Vaccine Biologics Order Form	The product is distributed from Central Serum Depot
Community Pharmacies (including sub-depot pharmacies for their own supply)	Influenza	Community Pharmacies are given an allocation in their **pharmacy SharePoint site**, which can then be adjusted if required.	The product is distributed from McKesson to pharmacy on next regular scheduled delivery day **NOTE:** Matrix distributes to Shoppers Drug Mart and Loblaw locations. McKesson distributes to all other pharmacy locations.
	COVID / Pneumococcal	Community Pharmacies place orders in their pharmacy SharePoint site; the Vaccine Operations Centre process the orders. Use special order form for ARF high risk clients	The product is distributed from McKesson to pharmacy on next regular scheduled delivery day.

3. HOW TO RETURN YOUR UNUSED OR EXPIRED VACCINES

Any unused or expired vaccines should be returned to the distribution centre that you received your order from (i.e., to McKesson or Central Serum Depot).

We encourage anyone who may have questions to contact the Vaccine Operations Centre at: VOCopsDesk@GNB.CA..

4. HOW TO REPORT YOUR ADMINISTERED DOSES

To meet *Public Health Act* regulations, all immunizers who administer publicly funded vaccines must document immunizations within **one week** of administration to the Minister which is achieved when this data is entered into the Public Health Information Solution (PHIS).

As part of participation in delivery of Influenza, Pneumococcal and COVID-19 vaccines, this data is necessary to accurately inform the Minister and New Brunswick population of the progress of not only the influenza campaign in a timely manner but other programs as well.

This will be monitored to ensure participants are providing the required data in the specified time. Carefully review the following table outlining the specific processes for reporting each vaccine.

Note: If faxing is not an option, contact coviddataentry@gnb.ca for instructions on mailing the consents instead.

Reporting Administered Vaccine Doses		
Immunization Provider	**Vaccine Type**	**Data Entry Process - Administration Forms**
Health Care Practitioners (Physicians, nurse practitioners, midwives, community health centres)	Influenza Pneumococcal COVID	Physicians/Nurse Practitioners/Midwives submit publicly funded immunizations to Medicare, which in turn sends them to PHIS on a weekly basis. **OR** Send the consent form filled to the PHIS data entry team. Please fax the form, accompanied by a cover sheet specifying the sender's details and the total number of consents being faxed, to **#1-833-415-1830.** Please also email coviddataentry@gnb.ca to notify them that the consents have been faxed.
Licensed Nursing Homes and **Non-Licensed Nursing Homes** **Hospital Inpatients Units** **Mental Health/Addiction institutions and Correctional Facilities**	Influenza Pneumococcal COVID	Send the consent form filled to the PHIS data entry team. Please fax the form, accompanied by a cover sheet specifying the sender's details and the total number of consents being faxed, to **#1-833-415-1830.** Please also email coviddataentry@gnb.ca to notify them that the consents have been faxed.
Extra Mural Program (EMP) (i.e., homebound clients and residents of Adult Residential Facilities)	Influenza Pneumococcal COVID	All administered immunizations are entered into PHIS manually directly by EMP or the data entry staff.

First Nation health care practitioners and nurses	Influenza Pneumococcal COVID	Immunizations are entered manually into PHIS by the immunizer. **OR** Send the consent form filled to the PHIS data entry team. Please fax the form, accompanied by a cover sheet specifying the sender's details and the total number of consents being faxed, to **#1-833-415-1830.** Please also email coviddataentry@gnb.ca to notify them that the consents have been faxed.
RHA Public Health	Influenza Pneumococcal COVID	All Public Health administered immunizations are entered into PHIS manually
Community Pharmacies (Including sub-depot pharmacies for their own supply)	Influenza Pneumococcal COVID	Immunizations are submitted for payment in the DIS payment system. The immunization records get integrated into the PHIS system
Hospital Employee Health Program	Influenza COVID	Send the consent form filled to the PHIS data entry team. Please fax the form, accompanied by a cover sheet specifying the sender's details and the total number of consents being faxed, to **#1-833-415-1830.** Please also email coviddataentry@gnb.ca to notify them that the consents have been faxed.

5. HOW TO REPORT YOUR VACCINE WASTAGE AND INVENTORY

All Immunization providers are responsible to meet standards of inventory management as per this document: Vaccine Supply.

For Influenza and Pneumococcal vaccines, each site needs to keep a record of inventory (current number of doses and expiry) for all publicly funded vaccines (including influenza vaccine and pneumococcal vaccine) and be prepared to report these when requested. PHIS users complete monthly PHIS inventory.

For COVID-19 vaccines, carefully review the following table outlining the specific processes for reporting your wastage and inventory for each vaccine.

Vaccine Wastage and Inventory Reporting Process			
Immunization Provider	**Vaccine Type**	**Wastage Reporting Process**	**Inventory Reporting Process**
RHA Public Health	COVID- 19	**Reported on a weekly basis every Monday by 12:00pm** Weekly Inventory and Wastage will be submitted via email with the template that was distributed to Public Health Offices. Please send weekly Inventory and Wastage templates to DHVaccLog@GNB.CA on Mondays by noon	**Reported on a weekly basis every Monday by 12:00pm.** Weekly Inventory and Wastage will be submitted via email with the template that was distributed to Public Health Offices. Please send weekly Inventory and Wastage templates to DHVaccLog@GNB.CA on Mondays by noon
Community Pharmacies	COVID- 19	**Reported on a weekly basis on Mondays**. Pharmacies access the DIS (Drug Inventory System) Community Pharmacy SharePoint site (below) to submit their wastage electronically. Within the platform, they utilize a formatted drop-down menu to conveniently log their wastage information.	**Reported on a weekly basis on Fridays.** Pharmacies are responsible for reporting their inventory by email to the Vaccine Operations Center (VOC) at: voc-opsdesk@gnb.ca. A weekly email reminder, containing a vaccine table (below), is sent every Wednesday, requesting to submit their inventory by Friday. It is **mandatory for pharmacies** to complete the table and email it back to the Vaccine Operations Center (VOC). https://hpsint.gnb.ca/dis/Pages/default.asx

6. INFLUENZA VACCINE INFORMATION

(This section will be updated soon to reflect new influenza recommendations)

6.1 WHAT ARE THE VACCINE COMPONENTS THIS YEAR?

The World Health Organization (WHO) recommends that the quadrivalent vaccines for use in the 2023-2024 northern hemisphere influenza season contain the following components:

- an A/Victoria/4897/2022 (H1N1) pdm09-like virus.
- an A/Darwin/9/2021 (H3N2)-like virus; and
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus

6.2 WHAT ARE THE AVAILABLE INFLUENZA VACCINE PRODUCTS THIS YEAR AND ELIGIBILITY?

Supplier	Name of the Product	Age Group	DIN
Sanofi Pasteur	Fluzone (multidose vial)	6 months to 64 yrs. old *	2432730
Sanofi Pasteur	Fluzone (prefilled syringe)	6 months to 64 yrs. old *	2420643
GSK	FluLaval Tetra (multidose vial)	6 months to 64 yrs. old *	2420783
Sanofi Pasteur	Fluzone High-Dose (prefilled syringe)	65 yrs. old and over **	2500523
AstraZeneca	FluMist (Intranasal spray, pre-filled single use sprayer)	2 to 17 yrs. and 364 days old ***	02426544

***Fluzone and FluLaval quadrivalent influenza vaccines** are offered to individuals aged six months and older including residents of long-term care facilities who are **UNDER** the age of 65 years.

** **The High Dose quadrivalent vaccine** is designed for all individuals 65 years of age and OVER and it contains four times the influenza virus antigen concentration compared to the standard vaccine. This higher concentration aims to stimulate a stronger immune response in older individuals, providing them with improved protection against influenza.

- NOTE: It is important to note that the high dose vaccine is not authorized for those under 65 years of age and is not publicly funded for other indications, such as immunocompromised clients.

*** **New FluMist Quadrivalent Live Attenuated Influenza Vaccine (Q-LAIV**): addresses needle fear in this age group. It is important to respect the eligibility criteria as vaccine supply is based on specific cohort populations and if given outside the criteria, we may not have sufficient supply available to give to those who have needle fears.

- NOTE: For individuals aged 2 years to less than 9 years of age receiving the seasonal influenza vaccine for the first time; and for whom the first dose was the FluMist, it is necessary to **keep a second dose of FluMist readily available** (i.e., kept on hand). Failing to do so may require a second dose via needle injection, contradicting the intended purpose for these children.

6.3 WHAT IS THE DOSAGE AND FREQUENCY OF INFLUENZA VACCINES?

Quadrivalent influenza vaccines (QIVs) doses are **0.5 ml** for all age groups and given **intramuscularly or intranasally.**

Recommended Influenza Doses by Age		
Age Group	**Dose**	**No. of Doses**
9 years and older	**0.5 ml**	1
6 months – 8 years*	**0.5 ml**	1 or 2*
QIV for under 65 years old	**0.5 ml**	1
65+ and receiving **FluZone HD**	**0.7 ml**	1
2 years to 17 years receiving **FluMist ***	**0.2 ml**	1 or 2*

* Children 6 months to less than 9 years of age who have never received the seasonal influenza vaccine require two doses of influenza vaccine, with a minimum interval of four weeks between doses. Eligible children <9 years of age who have received one or more doses of seasonal influenza vaccine in the past should receive one dose per season thereafter.

6.4 WHAT IS THE FLUMIST VACCINE?

FluMist® Quadrivalent is a “live” virus vaccine administered as a nasal spray in both nostrils. Children aged two to less than 8 years who have not received an influenza vaccine need a second dose a month after the first. **This year in NB, it will only be available for children aged between 2 to 17 years and 364 days old to address needle fears.**

Immunizers should wear gloves when administering the intranasal influenza vaccine because of an increased likelihood of contact with mucous membranes and bodily fluids during the procedure.

If nasal congestion is present that might impede delivery of the vaccine to the nasopharyngeal mucosa, deferral of administration should be considered until resolution of the illness or offer another influenza vaccine.

Because FluMist is a live attenuated vaccine**, it has the potential for transmission to immunocompromised contacts**. Children should attempt to avoid, whenever possible, individuals who are severely immunocompromised (e.g., bone marrow transplant recipients requiring isolation) for at least 2 weeks following vaccination. In circumstances where contact with severely immunocompromised individuals is unavoidable, the potential risk of transmission of the influenza vaccine virus should be weighed against the risk of acquiring and transmitting the influenza virus.

6.5 WHO SHOULD NOT ROUTINELY RECEIVE AN INFLUENZA OR FLUMIST VACCINE?

The following individuals should not routinely receive an Influenza vaccine.

- For **FluMist® Quadrivalent**: Children less than 2 years of age.
- For **Flulaval® Tetra or Fluzone® Quadrivalent**: Infants less than 6 months of age.
- **Any influenza vaccine should be avoided by:**
    1. **People who have a serious acute febrile illness.**

2. **People who have had a serious allergic reaction (anaphylaxis) to any of the components of influenza vaccine (except for egg).**
    - Note: Egg allergy is not a contraindication for influenza vaccination, and egg-allergic individuals may be vaccinated using age-appropriate products as per the National Advisory Committee on Immunization (NACI).
3. **People known to have had Guillain-Barré Syndrome (GBS) within 6 weeks of a previous influenza vaccine.**
    - Note: Caution is advised regarding subsequent influenza vaccination in persons with a previous history of GBS within six weeks of a previous influenza vaccination.

Additionally, the following people should **NOT** routinely receive the **FluMist®** Quadrivalent (Q-LAIV) and refer to the Canadian Immunization Guide's recommendations for influenza vaccine type by age group:

1. **People with severe asthma**: Defined as those on high-dose oral or inhaled steroids, or those with active wheezing, or those medically treated for wheezing within the last 7 days prior to vaccination.
2. **People with weakened immune systems**: Due to disease or medical treatment.
3. **Children less than 18 years of age**: Who are on long-term aspirin-containing therapy.
4. **People taking medication active against influenza** (influenza antiviral medication).
5. **Pregnant women:** They should be offered a quadrivalent influenza vaccine instead.

6.6 CAN PEOPLE WITH EGG ALLERGIES RECEIVE AN INFLUENZA VACCINE?

Egg allergy is not a contraindication for influenza vaccination, and egg-allergic individuals may be vaccinated using age-appropriate products as per NACI's Statement on seasonal influenza vaccine for 2023–2024.

All influenza vaccine products authorized for use in Canada are manufactured by a process involving chicken eggs, which may result in the vaccines containing trace amounts of residual egg protein. NACI has concluded that egg allergic individuals without other contraindications may be vaccinated against influenza (with any product) without a prior influenza vaccine skin test and with the full dose. The vaccine may be given in any settings where vaccines are routinely administered.

As with any vaccine, immunizers should always be prepared for and have the necessary equipment to respond to a vaccine emergency.

6.7 CAN PEOPLE WHO PREVIOUSLY EXPERIENCED OCULAR RESPIRATORY SYNDROME (ORS) AFTER RECEIVING AN INFLUENZA VACCINE BE VACCINATED?

Oculo-respiratory syndrome (ORS), which is defined as the presence of bilateral red eyes and one or more associated symptoms (cough, wheeze, chest tightness, difficulty breathing, difficulty swallowing, hoarseness, or sore throat) that starts within 24 hours of vaccination, with or without facial edema, was found during the 2000–2001 influenza season; few cases have been reported since then. **ORS is not considered to be an allergic response.**

There is no evidence to suggest that oculo-respiratory syndrome (ORS) will be a concern following immunization. Individuals who have experienced ORS, including those with a severe presentation

(Bilateral red eyes, cough, sore throat, hoarseness, facial swelling) but without lower respiratory tract symptoms, may be safely re-immunized with influenza vaccine.

Persons who experienced ORS with lower respiratory tract symptoms (wheeze, chest tightness, difficulty breathing) within 24 hours of immunization, an apparent significant allergic reaction to the immunization or any other symptoms (throat constriction, difficulty swallowing) that raise concerns regarding the safety of re-immunization should have a consultation with a Medical Officer of Health or another expert.

6.8 CAN PREGNANT AND BREASTFEEDING INDIVIDUALS RECEIVE AN INFLUENZA VACCINE?

All pregnant individuals should receive seasonal influenza immunization, as evidence demonstrates they are at higher risk of complications from influenza. Seasonal influenza vaccine is safe for pregnant and breastfeeding individuals.

NOTE: Pregnant individuals should not receive live attenuated vaccines. They should be offered a quadrivalent influenza vaccine instead.

6.9 CAN THE INFLUENZA VACCINE CAUSE INFLUENZA ILLNESS?

The Flulaval® Tetra (GSK) and the Fluzone® Quadrivalent do not contain live virus and therefore cannot cause influenza.

FluMist® Quadrivalent contains live attenuated (weakened) viruses that do not cause influenza illness. The live attenuated (weakened) viruses are temperature sensitive, which means they are designed to only replicate at cooler temperatures found within the nose. The viruses cannot infect the lungs or other areas where warmer temperatures exist.

6.10 WHAT ARE THE SIDE EFFECTS OF THE INFLUENZA VACCINE?

One third of those immunized report soreness at the injection site for up to two days. Flu-like symptoms (fever, sore muscles, and tiredness) may occur within 6 to 12 hours after immunization and last 1 to 2 days, especially in those receiving the vaccine for the first time. Anaphylactic hypersensitivity reactions occur rarely.

6.11 CAN YOU RECEIVE AN INFLUENZA VACCINE BEFORE OR AFTER HAVING DONATED/RECEIVED BLOOD OR IMMUNE GLOBULIN?

Yes.

6.12 HOW SOON FOLLOWING IMMUNIZATION DOES PROTECTION DEVELOP AND HOW LONG DOES IT LAST?

Protection from the seasonal influenza vaccine generally begins 10 to 14 days after immunization and may last 6 months or longer.

6.13 CAN THE INFLUENZA VACCINE BE CO-ADMINISTERED WITH OTHER VACCINES?

Yes, multiple vaccines can be administered simultaneously, **including the Influenza Vaccine, COVID-19 Vaccine, Tdap Vaccine, and Pneumococcal Vaccine**. However, it is essential to use separate syringes for each vaccine and inject them in different sites.

For Live Attenuated Vaccines:

- **FluMist**, a live attenuated vaccine, can be administered concurrently with the MMR and varicella vaccines. **If not given at the same time, another live vaccine should be administered at least four weeks before or after receiving FluMist.**

6.14 WHO CAN RECEIVE A FREE INFLUENZA VACCINE IN NEW-BRUNSWICK?

- All New-Brunswick residents.
- Out-of-province students can get their influenza vaccine through student health services at their respective post-secondary institutions.
- New residents and non-residents (including Ukrainians, refugees, and Temporary Foreign Workers) without a Medicare card can get an influenza vaccine free of charge from a pharmacist.

6.15 WHAT IS THE INFLUENZA VACCINE BILLING PROCESS FOR PRACTITIONERS?

- Physicians and Nurse Practitioners are to refer to the Physicians Manual for billing practices specific to 2022-2023 seasonal influenza immunization.
- Midwives are to refer to the Midwives' Medicare Billing Manual.
- Pharmacist claims are submitted as required under the New Brunswick Prescription Drug Program (NBPDP) Plan "I."

6.16 WHERE CAN I GET MORE INFORMATION ON THE INFLUENZA VACCINE?

- From the Government of New-Brunswick's website at: Communicable Disease Control Resources for Health Care Professionals (gnb.ca)
- National Advisory Committee on Immunization (NACI) statement: Seasonal influenza vaccine for 2023-2024 - Canada.ca
- Recommendation on Repeated Seasonal Influenza Vaccination - Canada.ca
- Influenza Immunization Awareness Campaign | immunizecanada

7. PNEUMOCOCCAL VACCINE INFORMATION

7.1 WHAT IS INVASIVE PNEUMOCOCCAL DISEASE (IPD) AND WHY IS IT IMPORTANT?

Invasive pneumococcal disease (IPD) is caused by infection with the bacteria Streptococcus pneumoniae. Pneumococcal infection can lead to; pneumonia (infection of the lungs), otitis media (infection of the middle ear) and meningitis (infection of the membranes around the brain and spinal cord). It is one of the leading causes of illness, hospitalization, and death worldwide.

This infection is more common in the very young, persons at high risk due to underlying medical conditions or lifestyle factors and adults over 65 years of age. People with certain health problems or who are immunocompromised are at higher risk of invasive pneumococcal disease. The best way to protect yourself and others is by getting vaccinated.

7.2 WHAT IS THE AVAILABLE PNEUMOCOCCAL VACCINE PRODUCT FOR ADULTS?

Supplier	Product name	DIN
Pfizer	Pneumococcal 20-valent conjugate	02527049

7.3 WHAT ARE THE ELIGIBILITY CRITERIA FOR PNEUMOCOCCAL VACCINE AS PART OF THE ADULT ROUTINE IMMUNIZATION AND FOR THOSE AT INCREASED RISK OF IPD?

Routine immunization for adults

All adults ≥ 65 years of age who have never previously received a dose of pneumococcal vaccine can receive one dose of Pneu-C-20.

- If a dose of pneumococcal vaccine was received ≥ 65 years of age, no Pneu-C-20 is needed.

Adults at increased risk of invasive pneumococcal disease (refer to Canadian Immunization Guide for eligible conditions who are at increased risk of IPD)

- Individuals ≥18 years with eligible conditions who have never received a pneumococcal vaccine can receive one dose of Pneu-C-20.
- Individuals ≥18 years with eligible conditions and previously vaccinated with Pneu-C-13 and Pneu-P-23 can receive a dose of Pneu-C-20 at least **one year** after the last dose of Pneu-P-23.
- Individuals ≥18 years with eligible conditions and previously vaccinated only with Pneu-P-23 can receive a dose of Pneu-C-20 at least **one year** after their dose Pneu-P-23.
- Individuals ≥18 years with eligible conditions and previously vaccinated with Pneu-C-13 only, can be given a dose of Pneu-C-20 at least **one year** after the last dose of Pneu-C-13. However, a minimum interval of 8 weeks is needed between Pneu-C-13 and Pneu-C-20.
- Individuals ≥18 years newly admitted to a long-term care facility can receive one dose of Pneu-C-20. (For the schedule to be followed for an individual who has already received a pneumococcal vaccine, refer to the Canadian Immunization Guide)
- Hematopoietic stem cell transplant recipients (HSCT) can receive a 3+1 dose schedule. The timing should be determined in consultation with the transplant specialist. (Refer to Canadian Immunization Guide).

7.4 WHO SHOULD NOT ROUTINELY RECEIVE A PNEUMOCOCCAL 20-VALENT CONJUGATE VACCINE?

This vaccine should not be given if the client had a life-threatening reaction to a previous dose or to any part of the vaccine or its container. Always refer to product monograph.

7.5 WHAT ARE THE SIDE EFFECTS OF THE PNEUMOCOCCAL 20-VALENT CONJUGATE VACCINE?

Reactions to the vaccine are mild and last one to two days. Common reactions to the vaccine may include soreness, redness and swelling where the vaccine was given. Fever may also occur. Anaphylactic hypersensitivity reactions occur rarely.

7.6 CAN THE PNEUMOCOCCAL 20-VALENT CONJUGATE VACCINE BE CO-ADMINISTERED WITH OTHER VACCINES?

Yes. This vaccine may be co-administered with other vaccines such as Influenza, COVID-19 vaccines, Tdap, etc.

7.7 WHAT IS THE PNEUMOCOCCAL 20-VALENT CONJUGATE VACCINE BILLING PROCESS FOR PRACTITIONERS?

- Physicians and Nurse Practitioners are to refer to the Physicians Manual for billing practices specific to pneumococcal immunization.
- Midwives are to refer to the Midwives' Medicare Billing Manual.
- Pharmacist claims are submitted as required under the New Brunswick Prescription Drug Program (NBPDP) Plan "I."

7.8 WHO CAN RECEIVE A FREE PNEUMOCOCCAL 20-VALENT CONJUGATE VACCINE IN NB?

- All New Brunswick residents who qualify according to the NB immunization program guide.

7.9 WHERE CAN I GET MORE INFORMATION ON THE PNEUMOCOCCAL 20-VALENT CONJUGATE VACCINE?

- Pneumococcal 20-valent conjugate vaccine (gnb.ca)
- Pneumococcal vaccine: Canadian Immunization Guide - Canada.ca
- Pneumococcal disease (gnb.ca)

8. COVID-19 VACCINE INFORMATION

As of June 15, 2024 the spring campaign is over. This section will be updated soon to reflect new COVID-19 recommendations.

New-Brunswick's recommendation on COVID-19 vaccines, provide **all** Health Care Professionals administering COVID-19 vaccines the essential technical COVID vaccine information including its provincial recommendations from the Department of Health, Public Health. New-Brunswick's recommendations may differ from National Advisory Committee on Immunizations (NACI), the CIG chapter on COVID-19 vaccine, Product Monographs and Health Canada authorized schedules.

Important Notice*: Following each statement released by NACI, the Department of Health, Public Health will conduct a thorough review. Our provincial recommendations will be updated after final approval by government.* ***Until such time, the recommendations for New Brunswick remain unchanged****.* ***Immunizers are to wait for the official review process and refrain from implementing changes independently. Any updates will be communicated promptly to our partners.*** **This guide is your primary resource when administering COVID-19 vaccines in New Brunswick.**

8.1 WHO SHOULD GET THE VACCINE ?

Starting spring 2024 it is recommended that these groups at higher risk are especially encouraged to get vaccinated with a mRNA XBB.1.5 COVID-19 vaccine:

- Individuals aged 65 and older.
- Individuals who live in a long-term care facility, including nursing homes or adult residential facilities;
- Individuals who are immunocompromised aged 6 months and older;

8.2 WHAT ARE THE AVAILABLE COVID-19 VACCINES THIS YEAR?

NACI recommends a very similar approach to spring programs that have been recommended in Canada for the last two years.

The XBB.1.5 COVID-19 vaccines continue to be the recommended products for unvaccinated and previously vaccinated individuals.

2023-2024 COVID-19 Product as of March 25, 2024					
Supplier	**Product name**	**Age Group**	**Dose**	**No. of Doses**	**DIN**
Moderna Spikevax	Omicron XBB.1.5 (multidose vial)	6 months to under 5 years old	25 mcg	1 or more*	02541270
Moderna Spikevax	Omicron XBB.1.5 (multidose vial)	5 years to 11 years of age	25mcg	1	02541270
		12 years and older	50mcg	1	
Novavax Nuvaxovid	XBB.1.5 (multidose vial) **DO NOT DILUTE**	12 years and older	5mcg	1	02543656

Pfizer Comirnaty	Omicron XBB.1.5 (multidose vial) **DO NOT DILUTE**	12 years and over	30 mcg	1	2541823
Pfizer Comirnaty	Omicron XBB.1.5 (multidose vial) **DO NOT DILUTE**	5 years to 11 years	10 mcg	1	2541858
Pfizer Comirnaty	Omicron XBB.1.5 (multidose vial) **DILUTE PRIOR TO USE**	6 months to under 5 years old	3mcg	1 or more	2541866

8.3 WHAT ARE NEW-BRUNSWICK'S RECOMMENDED INTERVALS WHEN ADMINISTERING MRNA XBB.1.5 VACCINES?

On January 12, 2024 NACI released its updated guidance on the use of COVID-19 vaccines for individuals who have not previously been vaccinated or have been previously vaccinated and will be receiving an mRNA XBB.1.5 vaccine. **The Department of Health's, Public Health has reviewed the statement on the schedule for mRNA XBB.1.5 vaccines approved alignment with the guidance provided in the statement.**

As of December 15, 2023, the Canadian Immunization Guide has updated its COVID-19 vaccine chapter to reflect NACI's recommended XBB.1.5 vaccination schedules**.** Follow the appropriate vaccination schedule as outlined in the Chapter on COVID-19 Vaccines: Canadian Immunization Guide, based on whether the individual has previously received vaccines or is unvaccinated.

For unvaccinated individuals, follow:

- Table 1. Immunization schedule for previously unvaccinated individuals by age starting their vaccinations with XBB.1.5 mRNA COVID-19 vaccines.

For previously vaccinated individuals, follow:

- Table 2. Summary of number of recommended XBB.1.5 mRNA COVID-19 vaccine doses based on previous non-XBB.1.5 vaccination history

8.4 WHAT ARE NEW-BRUNSWICK'S RECOMMENDED INTERVALS WHEN ADMINISTERING THE NUVAXOVID XBB.1.5 VACCINE?

On December 5, 2023, Health Canada authorized the use of Novavax Nuvaxovid XBB.1.5 vaccine for individuals 12 years of age and older.

On March 8, 2024, the Public Health Agency of Canada (PHAC) released the National Advisory Committee on Immunization's (NACI) Updated guidance on the use of the protein subunit COVID-19 vaccine (Novavax Nuvaxovid). This guidance is based on current evidence and NACI expert opinion.

While mRNA vaccines remain the primary recommendation for COVID-19 vaccination, Novavax Nuvaxovid XBB1.5 is now available for individuals who, due to medical reasons or personal preferences, are unable or unwilling to receive an mRNA XBB.1.5 COVID-19 vaccine.

The Department of Health, Public Health has reviewed the Nuvaxovid XBB.1.5 COVID-19 Vaccine Product Monograph and Health Canada's COVID-19 vaccine and treatment portal regulatory information . **As of April 2, 2024, the following schedule is recommended by New-Brunswick Public Health's Department for those aged 12 and over:**

For unvaccinated or partially vaccinated individuals:

While the authorized schedule is 2 doses, NACI recommends that unvaccinated individuals who are not immunocompromised and receiving Novavax Nuvaxovid XBB.1.5 may follow a 1-dose schedule.

Unvaccinated individuals who are moderately to severely immunocompromised and receiving Novavax Nuvaxovid XBB.1.5 should receive a minimum of 2 doses.

Refer to the CIG Immunization of immunocompromised persons for additional details.

For previously vaccinated individuals (received a full primary series with original/bivalent mRNA or Novavax original product or XBB1.5):

Only 1 dose is recommended, 6 months (minimum of 3 months) since last non-XBB.1.5 vaccine or infection (whichever is most recent).

8.5 ARE PREVIOUS COVID-19 VACCINES INTERCHANGEABLE WITH XBB.1.5 VACCINES?

All previous COVID-19 vaccine products are interchangeable, regardless of which product was previously received **before** getting the XBB.1.5 additional dose.

It is recommended individuals receive all COVID-19 XBB1.5 doses from the same manufacturer especially in the infants aged between 6 months to under 5 years old. There is limited data regarding the interchangeability between XBB.1.5 products (Moderna, Pfizer and Novavax).

8.6 WHEN A CHILD RECEIVES A VACCINE AT AGE 4 THEN TURNS 5, WHAT DOSAGE DO I GIVE AND HOW MANY DOSES?

Complete the series with a vaccine dosage suitable for the age (i.e., a pediatric dose for those over 5 years old). Follow the manufacturer's recommended number of doses for the age group they started with between 6 months and under 5 years (i.e., 2 doses for Moderna and 3 doses for Pfizer). Add an additional dose if the child is immunocompromised.

More information can be found in the Updated guidance on the use of COVID-19 vaccines in individuals who have not previously been vaccinated against COVID-19 : NACI, October 27, 2023 and in the document COVID-19 vaccines: Planning guidance for immunization clinics: Managing vaccine administration errors or deviations.

8.7 WHY DOES MODERNA INFANT XBB.1.5 NEED LESS DOSES THAN PFIZER'S?

The original evaluation of the Pfizer-BioNTech Comirnaty vaccine (3 mcg) in children aged 2 to 4 didn't indicate strong enough immune responses after the first two doses, when compared to adults aged 16 to 25 who received the 30-mcg vaccine. However, when a third dose was administered to children aged 6 months to 4 years (also Comirnaty original 3 mcg), the immune responses increased to meet the required criteria.

Details can be found in NACI's archived statement for the Pfizer-BioNTech Comirnaty original 3 mcg vaccine: Recommendations on the use of Pfizer-BioNTech Comirnaty (3 mcg) COVID-19 vaccine in children 6 months to 4 years of age (2022-10-21).

8.8 WHERE CAN I EASILY FIND COVID-19 VACCINE PRODUCT MONOGRAPHS?

All information can be found on Health Canada's COVID-19 vaccines and treatments portal (canada.ca) website. To easily find the product monograph, the links are located below:

1. Moderna Spikevax Omicron XBB1.5 Product Monograph
2. Pfizer Comirnaty's Omicron XBB.1.5 Product Monograph
3. Novavax Nuvaxovid XBB.1.5 Product Monograph

8.9 WHERE CAN I EASILY FIND MANUFACTURERS WEBSITES?

1. Moderna Spikevax: Canada | SPIKEVAX™ Information
2. Pfizer Comirnaty: Home | CVDVACCINE
3. Novavax Nuvaxovid: COVID-19 Vaccine Information for Canada Healthcare Professionals

8.10 WHERE CAN I EASILY FIND VACCINE EXTENDED EXPIRATION DATES?

Once the manufacturer extends their shelf-life expiry date, the Vaccine Operation Center (VOC-opsDesk@GNB.CA) will send out an email to notify all partners offering COVID-19 vaccines in New-Brunswick. Product updates are also shared by the Department of Health through the wide distribution email "Vaccine News" to partners.

For those working directly with the PHIS (Public Health Information Solutions) system, the extended expiry dates are updated automatically.

All manufacturers also include the extended shelf-life expiry dates on their manufacturer's website (see previous question for manufacturer website links).

PLEASE NOTE: shelf-life extensions are not always immediately updated in the Canadian Vaccine Catalogue on CANImmunize website. The lot information in the Canadian Vaccine Catalogue is updated **monthly** by Health Canada.

8.11 CAN I RECEIVE A DOSE OF COVID-19 IF I DON'T MEET THE ELIGIBILITY CRITERIA?

- **Starting spring 2024**, it is recommended that these groups at higher risk are especially encouraged to get vaccinated with a mRNA XBB.1.5 COVID-19 vaccine:
- Individuals aged 65 and older.
- Individuals who live in a long-term care facility, including nursing homes, special care homes, or adult residential facilities;
- Individuals who are immunocompromised aged 6 months and older;
- Individuals who received a dose as part of the fall vaccination campaign that began October 16,2023 and are not part of the SPRING eligibility guideline mentioned above and are considered fully up to date and do not require another vaccine this spring.
- Individuals who haven't received their fall-winter dose should consider getting one as soon as possible to ensure they meet the criteria to receive their fall-winter for the next respiratory season (2024-2025)
- However, if an individual who does not meet the eligibility criteria for the spring campaign XBB1.5 vaccine, wish to have a dose they should discuss with their primary care provider, pharmacist or public health.
- This is a very similar approach to spring programs that have been recommended in Canada for the last two years. NACI is providing this guidance to help provinces and territories begin planning spring 2024 COVID-19 vaccine programs.

8.12 DO THE XBB.1.5 VACCINES CONTAIN ANY NEW INGREDIENTS?

No. The XBB.1.5 formulations from all COVID-19 vaccine manufacturers are not new vaccines. The antigen has been updated**;** all other ingredients remain consistent.

8.13 WHO SHOULD NOT ROUTINELY RECEIVE A COVID-19 VACCINE?

- Children under 6 months old.
- People who have a serious acute febrile illness.
- People who have had a **confirmed** severe, immediate (4 hours or less following vaccination) allergic reaction after previous administration of an mRNA COVID-19 vaccine.
    - Note**:** It is still possible for those individuals to receive a COVID-19 vaccine. Please refer to the next question.
- People who have had myocarditis and/or pericarditis within 6 weeks of receiving a previous dose of an mRNA COVID-19 vaccine should have further doses deferred and consult with their health care practitioner. Further guidelines are available in the section Contraindications and precautions of the COVID-19 vaccine Chapter: Canadian Immunization Guide - Canada.ca
- People with a previous history of Multisystem inflammatory syndrome (MIS-C or MIS-A), vaccination or re-vaccination should be postponed until clinical recovery has been achieved or until it has been ≥ 90 days since diagnosis, whichever is longer.

8.14 SHOULD IMMUNOCOMPROMISED INDIVIDUALS RECEIVE ADDITIONAL DOSES OF THE XBB.1.5?

Yes. In the spring of 2024, it is recommended that individuals with certain immunocompromising conditions be immunized with a spring dose of an XBB.1.5 mRNA COVID-19 vaccine. This is to provide stronger protection for those who may have a suboptimal immune response to vaccines. A vaccine series should ideally be completed at least 2 weeks before initiation of immunosuppressive therapies where possible.

The following list of immunocompromised individuals, including those receiving immunosuppressive therapy, are at increased risk for prolonged infection and serious complications from SARS-CoV-2 infection according to the Canadian Immunization Guide – Chapter on COVID-19: Immunocompromised persons.

8.15 CAN PEOPLE WITH ALLERGIES TO A COMPONENT OF THE VACCINE RECEIVE A COVID-19 VACCINE?

Yes. There is now sufficient evidence regarding allergies, hypersensitivities, and contraindications related to COVID-19 vaccines. Individuals with allergies can still receive a COVID-19 vaccine. Clear instructions for healthcare professionals now exist to navigate those individuals with confirmed or suspected allergies to components of a COVID-19 vaccine.

Please refer to the section on contraindications and precautions in the COVID-19 vaccine Chapter: Canadian Immunization Guide - Canada.ca.

8.16 CAN PEOPLE WHO PREVIOUSLY EXPERIENCED MYOCARDITIS AND/OR PERICARDITIS RECEIVE A COVID-19 VACCINE?

People who have had myocarditis and/or pericarditis within 6 weeks of receiving a previous dose of an mRNA COVID-19 vaccine should have further doses deferred and consult with their health care practitioner. Further guidelines are available in the section Contraindications and precautions of the COVID-19 vaccine Chapter: Canadian Immunization Guide - Canada.ca.

8.17 CAN PREGNANT AND BREASTFEEDING INDIVIDUALS RECEIVE A COVID-19 VACCINE?

Yes. It is recommended that all pregnant and breastfeeding individuals receive a COVID-19 **mRNA** vaccine, as the evidence demonstrates these populations are at higher risk of complications from SARS-COV-2. mRNA vaccines are safe for pregnant and breastfeeding individuals.

The safety and efficacy of the **Nuvaxovid XBB.1.5** in pregnant individuals have not yet been established. If considering its use during pregnancy, the potential benefits should outweigh possible risks for both the individual and baby. It's unknown if Nuvaxovid XBB.1.5 is excreted in human milk. A risk to the newborns/infants cannot be excluded. When deciding, consider the overall benefits of breastfeeding along with any potential concerns.

8.18 CAN THE COVID-19 VACCINE CAUSE SARS-COV-2 ILLNESS?

No. COVID-19 vaccines cannot cause SARS-CoV-2.

8.19 WHAT ARE THE SIDE EFFECTS OF THE COVID-19 VACCINE?

Common side effects, just like any other vaccine, are mild and temporary. They may include one or more of the following: pain, redness or swelling where the needle was given, tiredness, headache, muscle pain, joint pain, chills, fever. Approximately one-third of those who receive the

immunization experience localized soreness at the injection site, which may last for up to two days.

Anaphylactic hypersensitivity reactions occur rarely. Other rare reactions reported after getting an mRNA COVID-19 vaccine include myocarditis and/or pericarditis (inflammation of the heart or lining on the outside of the heart) or Bell's palsy (facial paralysis).

8.20 HOW SOON FOLLOWING COVID-19 IMMUNIZATION DOES PROTECTION DEVELOP AND HOW LONG DOES IT LAST?

Protection from the COVID-19 vaccine typically begins 10 to 14 days after immunization and may last 6 months or longer.

8.21 CAN COVID-19 VACCINES BE CO-ADMINISTERED WITH OTHER VACCINES INCLUDING INFLUENZA?

Yes. For individuals 6 months of age and older, COVID-19 vaccines may be given concurrently (i.e., same day), or at any time before or after, non-COVID-19 vaccines (including live and non-live vaccines).

8.22 ARE THERE "PREFERRED" COVID-19 VACCINE PRODUCTS IN CERTAIN AGE GROUPS?

As per NACI's statement released on October 27th, there are no further product preference to use by age group between mRNA XBB.1.5 products of Pfizer and Moderna vaccines.

The mRNA vaccines (Pfizer and Moderna) continue to be the recommended product over protein-based vaccines (Novavax) due to the availability of data to assess the benefits and risks of these vaccines. Viral Vector vaccines are no longer available.

8.23 I MADE AN ERROR WHILE ADMINISTERING A COVID-19 VACCINE: SITE/ROUTE, DOSAGE, INTERVAL, STORAGE OR OTHER DEVIATION. WHAT SHOULD I DO?

For guidance on the appropriate actions to take **specifically following a COVID-19 vaccine error/deviation of administration** (ex: valid or not valid, repeat the dose or not, and etc.), please refer to the following reference: COVID-19 vaccines: Managing vaccine administration errors or deviations - Canada.ca

Once vaccinators have understood what type of error occurred with the COVID-19 vaccine, they must also, in accordance with routine vaccination practices:

- Inform the client of the vaccine administration error as soon as possible after the error is identified:
  - The client should be informed of any implications/ recommendations for future doses, and possibility for local or systemic reactions and impact on the effectiveness of the vaccine (if applicable and as known).
  - If the client is under the care of a healthcare provider, the healthcare provider should be notified as well.
- As of March 2023, report all errors or near miss incidents in accordance with the New-Brunswick Immunization Program Management of Vaccine Administration Errors or Deviation for all Immunizers in order to capture the information in PHIS.
- If the error results in an adverse event following immunization (AEFI), complete an AEFI form and submit it to the local public health authority.

8.24 WHAT IS THE PROCESS FOR PHYSICIANS AND NURSE PRACTITIONERS TO BEGIN ADMINISTERING COVID-19 VACCINES?

Interested physicians and Nurse Practitioners are welcome to complete the **"COVID-19 Immunization Clinic Application Approval Form"** located on the Communicable Disease Control Resources for Health Care Professionals (gnb.ca) website and submit it to the voc-opsdesk@gnb.ca.

Once reviewed, the applicant will be notified of the decision. The application form outlines the criteria required for approval.

If approved, the New Brunswick Respiratory Season 2023-2024 Vaccine Guide, containing the necessary information including storage and handling, will be communicated along, with any additional details required.

8.25 HOW DO I STORE COVID-19 VACCINES?

Special attention will be required for the storage and handling of COVID-19 vaccines. All Health Care Professionals must refer to and store the COVID-19 vaccines according to their Product's Monograph (see question 8.8 in this guide for quick direct links to monographs).

Providers must be properly equipped to ensure the integrity and effectiveness of COVID-19 vaccines (i.e., cold chain and other procedures) are up to standards. COVID-19 Vaccine efficacy is best assured when the number of times vaccines are handled and transported is minimized.

Standards and policies related to vaccine transportation, storage and handling are located in the New-Brunswick's Immunization Program Guide → Vaccine Storage and Handling

8.26 WHO CAN RECEIVE A FREE COVID-19 VACCINE IN NEW-BRUNSWICK?

- All New Brunswick residents.
- Out-of-province students can get their COVID-19 vaccine free of charge from a pharmacist.
- New residents and non-residents (including Ukrainians, refugees, and Temporary Foreign Workers) without a Medicare card can get a COVID-19 vaccine free of charge from a pharmacist.

8.27 WHERE CAN I GET MORE INFORMATION ON COVID-19 VACCINES?

- COVID-19 vaccines (gnb.ca)
- COVID-19 vaccine: Canadian Immunization Guide - Canada.ca
- Vaccines for COVID-19 - Canada.ca
- National Advisory Committee on Immunization (NACI): Statements and publications - Canada.ca
- COVID-19 Information for the Public | immunizecanada