



# **2023-2024 New-Brunswick Respiratory Season Vaccine Guide**

## **Information for Immunizers**

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## 1. GENERAL INFORMATION

### 1.1 PURPOSE OF THIS DOCUMENT

The purpose of this document is to communicate to all Health and Allied 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 ensure they have the necessary competencies to safely administer Influenza, Pneumococcal and COVID-19 vaccines according to the New-Brunswick Immunization Program Guide (NBIPG) [Policy 2.4 – Immunization Competency Standards 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 NBIPG [Policy 2.7](#) and [Standard 3.8](#).
- **Provide** the client with a proof of immunization as per Regulation 2009-136, section 14 under the *Public Health Act*. Immunization cards are available at your local RHA Public Health office.
- **Manage** the vaccine cold chain and **store** vaccines as per NBIPG [Standards 3.4- Vaccine Storage and Handling](#) and their Product Monograph.
- **Safely** monitor clients post administration as per the NBIPG [Appendix 5.1 – Anaphylaxis Management in a Non-Hospital](#) Setting.

## 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).

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
<b>Health Care Practitioners (HCP) serviced by a sub-depot for routine vaccine deliveries</b> (Physicians, nurse practitioners, midwives, community health centres).	Influenza / Pneumococcal	This group sends their <a href="#">Publicly Funded Vaccine Biologics Order Form</a> to their applicable sub-depots who will then enter orders in the Public Health Information Solution (PHIS) using the Product Requisition.	<b>Influenza</b> is distributed from McKesson to sub-depots for pick-up by HCP. <b>Pneumococcal</b> 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 <a href="mailto:voc-opsdesk@gnb.ca">voc-opsdesk@gnb.ca</a> .	VOC will advise order details and pick up information via email confirmation
<b>Health Care Practitioners NOT serviced by a sub-depot</b> (Physicians, nurse practitioners, and midwives) in areas	Influenza	This group sends their <a href="#">Publicly Funded Vaccine Biologics Order Form</a> 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 <a href="#">Publicly Funded Vaccine Biologics Order Form</a>	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 <a href="mailto:voc-opsdesk@gnb.ca">voc-opsdesk@gnb.ca</a>	VOC will advise order details and pick up information via email confirmation
<b>Licensed Nursing Homes and Non-Licensed Nursing Homes</b> i.e., DVAs  <b>Extra Mural Program (EMP)</b> 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 <a href="mailto:DHVaccLog@GNB.CA">DHVaccLog@GNB.CA</a> 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 <a href="mailto:DHVaccLog@GNB.CA">DHVaccLog@GNB.CA</a> .	
<b>First Nation (FN) health care practitioners and nurses</b>	Influenza	FN communities send their orders to the Vaccine Operations Centre at the following email address <a href="mailto:DHVaccLog@GNB.CA">DHVaccLog@GNB.CA</a> 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 <a href="mailto:DHVaccLog@GNB.CA">DHVaccLog@GNB.CA</a>	
	Pneumococcal	Order is placed through Central Serum Depot (CSD) via the following form: <a href="#">Publicly Funded Vaccine Biologics Order Form</a>	The product is distributed from the CSD
<b>Public Health (PH)</b>	Influenza / Pneumococcal	PH enter orders directly into PHIS through the Product Requisition.	<b>Influenza</b> is distributed from McKesson to PH on the next scheduled delivery day. <b>Pneumovax</b> is

			distributed from Central Serum Depot
	COVID	Adds vaccine order to their zone spreadsheet in the <b>COVID SharePoint site</b>	The product is distributed from McKesson to PH on next scheduled delivery day
<b>Sub-depots</b> (Ordering for distribution purposes)	Influenza / Pneumococcal	Sub-depots enter their orders directly into the PHIS through the Product Requisition.	<b>Influenza</b> is distributed from McKesson to Sub-Depot on next scheduled delivery day. <b>Pneumovax</b> is distributed from Central Serum Depot
	COVID	Sends their orders to the Vaccine Operations Centre at the following email address <a href="mailto:voc-opsdesk@gnb.ca">voc-opsdesk@gnb.ca</a> .	VOC will advise order details and pick up information via email confirmation
<b>Hospital pharmacies</b> (For administration to inpatients and staff)  <b>Mental Health/Addiction institutions and Correctional Facilities</b>	Influenza	Sends their orders to the Vaccine Operations Centre at the following email address <a href="mailto:DHVaccLog@GNB.CA">DHVaccLog@GNB.CA</a> who then enters the orders in PHIS.	The product is distributed from McKesson to Hospital pharmacies, Mental Health/Addiction institutions and Correctional Facilities
	COVID	Sends their orders to the Vaccine Operations Centre at the following email address <a href="mailto:DHVaccLog@GNB.CA">DHVaccLog@GNB.CA</a>	
	Pneumococcal	Order is placed through Central Serum Depot via the following form: <a href="#">Publicly Funded Vaccine Biologics Order Form</a>	The product is distributed from Central Serum Depot
<b>Community Pharmacies</b> (including sub-depot pharmacies for their own supply)	Influenza	Community Pharmacies are given an allocation in their <b>pharmacy SharePoint site</b> , which can then be adjusted if required.	The product is distributed from McKesson to pharmacy on next regular scheduled delivery day <b>NOTE:</b> Matrix distributes to Shoppers Drug Mart and Loblaw locations. McKesson

			distributes to all other pharmacy locations
	COVID / Pneumococcal	Community Pharmacies place orders in their <b>pharmacy SharePoint site</b> ; the orders are processed by the Vaccine Operations Centre.	The product is distributed from McKesson to pharmacy on next regular scheduled delivery day

### 3. 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](mailto:coviddataentry@gnb.ca) for instructions on mailing the consents instead.

Reporting Administered Vaccine Doses		
Immunization Provider	Vaccine Type	Data Entry Process - Administration Forms
<b>Health Care Practitioners</b> (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.  <b>OR</b> Send the <a href="#">immunization administration forms</a> 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 <b>#1-833-415-1830</b> . Please also email <a href="mailto:coviddataentry@gnb.ca">coviddataentry@gnb.ca</a> to notify them that the consents have been faxed.
<b>Licensed Nursing Homes and Non-Licensed Nursing Homes</b> i.e., DVAs	Influenza Pneumococcal COVID	Send the <a href="#">immunization administration forms</a> 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 <b>#1-833-415-1830</b> . Please also

<p><b>Hospital pharmacies</b> (i.e., for inpatients and staff)</p> <p><b>Mental Health/Addiction institutions and Correctional Facilities</b></p>		<p>email <a href="mailto:coviddataentry@gnb.ca">coviddataentry@gnb.ca</a> to notify them that the consents have been faxed.</p>
<p><b>Extra Mural Program (EMP)</b> (i.e., homebound clients and residents of Adult Residential Facilities)</p>	<p>Influenza Pneumococcal COVID</p>	<p>All administered immunizations are entered into PHIS manually directly by the EMO or their data entry staff.</p>
<p><b>First Nation health care practitioners and nurses</b></p>	<p>Influenza Pneumococcal COVID</p>	<p>Immunizations are entered manually into PHIS by the immunizer</p> <p>OR</p> <p>Send the <a href="#">immunization administration forms</a> 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 <b>#1-833-415-1830</b>. Please also email <a href="mailto:coviddataentry@gnb.ca">coviddataentry@gnb.ca</a> to notify them that the consents have been faxed.</p>
<p><b>RHA Public Health</b></p>	<p>Influenza Pneumococcal COVID</p>	<p>All Public health administered immunizations are entered into PHIS manually</p>
<p><b>Community Pharmacies</b> (Including sub-depot pharmacies for their own supply)</p>	<p>Influenza Pneumococcal COVID</p>	<p>Immunizations are submitted for payment in the DIS payment system. The immunization records get integrated into the PHIS system</p>
<p><b>Hospital Employee Health Program</b></p>	<p>Influenza COVID</p>	<p>Send the <a href="#">immunization administration forms</a> 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 <b>#1-833-415-1830</b>. Please also email <a href="mailto:coviddataentry@gnb.ca">coviddataentry@gnb.ca</a> to notify them that the consents have been faxed.</p>

#### 4. HOW TO REPORT YOUR VACCINE WASTAGE AND INVENTORY

All Immunization providers are responsible to meet standards of inventory management as per [NBIPG Standard 3.6](#).

**For Influenza and Pneumococcal vaccines**, each site needs to keep a record of physical 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	<p><b>Reported on a weekly basis every Monday by 12:00pm</b></p> <p>The reports are found in the COVID-19 Immunization SharePoint site (below). All doses are captured in an excel worksheet called <b>“Inventory Wastage COVID vaccine.”</b></p> <p><a href="https://hsps.gnb.ca/sites/EPR/ER/VTFsl/_layouts/15/start.aspx#/">https://hsps.gnb.ca/sites/EPR/ER/VTFsl/_layouts/15/start.aspx#/</a></p>	<p><b>Reported on a weekly basis every Monday by 12:00pm.</b></p> <p>The reports are found in the COVID Immunization SharePoint site (below). All doses are captured in an excel worksheet called <b>“Inventory Wastage COVID vaccine.”</b></p> <p><a href="https://hsps.gnb.ca/sites/EPR/ER/VTFsl/_layouts/15/start.aspx#/">https://hsps.gnb.ca/sites/EPR/ER/VTFsl/_layouts/15/start.aspx#/</a></p>
Community Pharmacies	COVID-19	<p><b>Reported on a weekly basis on Mondays.</b></p> <p>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.</p> <p><a href="https://hpsint.gnb.ca/dis/Pages/default.aspx">https://hpsint.gnb.ca/dis/Pages/default.aspx</a></p>	<p><b>Reported on a weekly basis on Fridays.</b></p> <p>Pharmacies are responsible for reporting their inventory by email to the Vaccine Operations Center (VOC) at: <a href="mailto:voc-opsdesk@gnb.ca">voc-opsdesk@gnb.ca</a>. A weekly email reminder, containing a vaccine table (below), is sent every Wednesday, requesting to submit their inventory by Friday. It is <b>mandatory for pharmacies</b> to complete the table and email it back to the Vaccine Operations Center (VOC).</p> <p><a href="https://hpsint.gnb.ca/dis/Pages/default.aspx">https://hpsint.gnb.ca/dis/Pages/default.aspx</a></p>

## 5. INFLUENZA VACCINE INFORMATION

### 5.1 WHAT ARE THE VACCINE COMPONENTS THIS YEAR?

The [World Health Organisation](https://www.who.int) (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

## 5.2 WHAT ARE THE AVAILABLE INFLUENZA VACCINE PRODUCTS THIS YEAR AND ELEGIBILITY?

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.

## 5.3 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*
<b>QIV</b> for under 65 years old	0.5 ml	1
65+ and receiving <b>FluZone HD</b>	0.7 ml	1

2 years to 17 years receiving <b>FluMist</b> *	<b>0.2 ml</b>	1 or 2*
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\* 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.

#### 5.4 WHAT IS THE FLUMIST VACCINE?

FluMist® Quadrivalent is a “live” virus vaccine administered as a nasal spray in both nostrils. Children aged 2 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.

#### 5.5 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.

## 5.6 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.

## 5.7 CAN PEOPLE WHO PREVIOUSLY EXPERIENCED OCULAR RESPIRATORY SYNDROME (ORS) AFTER RECEIVING AN INFLUENZA VACCINE BE IMMUNIZED?

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.

### **5.8 CAN PREGNANT AND BREASTFEEDING WOMAN RECEIVE AN INFLUENZA VACCINE?**

All pregnant women 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 mothers.

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

### **5.9 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.

### **5.10 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.

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

Yes.

### **5.12 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.

### **5.13 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.**



- All individuals aged 65 or older: **a single dose is recommended** (even if they have previously received a dose before reaching 65 - based on other eligibility criteria). If an individual has already received a dose at age 65 or older, there is no need for an additional dose, unless they meet specific high-risk conditions outlined in the NBIPG [Standard 3.3 - Eligibility Criteria eligibility criteria for publicly funded vaccines in New Brunswick](#).
- Newly admitted residents of long-term care facilities should receive one dose:
  - For those who receive on admission under 65 years, another dose should be given at 65 years or after (with a minimum of 5 years interval between each dose)
  - If already received a dose at age 65 or older before admitted, there is no need to repeat, unless specific high risk conditions outline in table #2 in the NBIPG [Standard 3.3 - Eligibility Criteria eligibility criteria for publicly funded vaccines in New Brunswick](#).
- For all individuals aged 2 or older who have not received previous pneumococcal immunization and have specific health conditions putting them at higher risk of pneumococcal disease, we recommend consulting their primary care provider and referring to our NB Immunization Program Guide for potential alternative vaccine schedules: [Standard 3.3 Eligibility Criteria for Publicly Funded Vaccines in NB](#).

**6.2 WHAT IS THE DOSAGE AND FREQUENCY OF THE PNEUMOCOCCAL-23 VACCINE?**

Recommended Pneumococcal-23 Vaccine Dose by Age		
Age Group	Dose	No. of Doses
2 years to 64-year-old	0.5 ml	1 or more *
65 years and older	0.5 ml	1 or more *

\* See previous section for detailed information.

**6.3 WHO SHOULD NOT ROUTINELY RECEIVE A PNEUMOCOCCAL-23 VACCINE?**

Pneumococcal-23 vaccine should not be given if the client had a life-threatening reaction to a previous dose of pneumococcal vaccine, or to any part of the vaccine or its container. Always refer to **product monograph**.

**6.4 WHAT ARE THE SIDE EFFECTS OF THE PNEUMOCOCCAL-23 VACCINE?**

Reactions to the vaccine are generally 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.

**6.5 CAN THE PNEUMOCOCCAL-23 VACCINE BE CO-ADMINISTERED WITH OTHER VACCINES?**

Yes. The Pneumococcal-23 vaccine may be co-administered with other vaccines such as Influenza, COVID-19 vaccines, Tdap, etc.

#### **6.6 WHAT IS THE PNEUMOCOCCAL-23 VACCINE BILLING PROCESS FOR PRACTITIONERS?**

- Physicians and Nurse Practitioners are to refer to the Physicians Manual for billing practices specific to 2023-2024 Pneumococcal-23 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."

#### **6.7 WHO CAN RECEIVE A FREE PNEUMOCOCCAL-23 VACCINE IN NB?**

- All New-Brunswick residents who qualify according to the NB Immunization Program Guide.

#### **6.8 WHERE CAN I GET MORE INFORMATION ON THE PNEUMOCOCCAL-23 VACCINE?**

- [Pneumococcal disease \(gnb.ca\)](https://gnb.ca)
- [Pneumococcal vaccine: Canadian Immunization Guide - Canada.ca](https://www24.international.gc.ca/vaccines-vaccins/immunization-immunisation/immunization-immunisation.aspx)
- [Pneumococcal vaccine | immunizecanada](https://immunizecanada.ca)

### **7. COVID-19 VACCINE INFORMATION**

**Please be aware that this section has been revised based on information available as of the: 6<sup>th</sup> of September 2023.** We will continue to update it with the latest information as it becomes available from Health Canada and the National Advisory Committee on Immunizations (NACI).

The WHO advisory group is recommending a single strain fall vaccine for the XBB.1.5 lineage in the autumn of 2023. Like the annual influenza vaccine, these vaccines will receive regular updates to match the virus's evolution and will be introduced each fall accordingly.

#### **7.1 WHAT ARE THE CURRENTLY AVAILABLE VACCINE PRODUCTS AND ELEGIBILITY?**

For **BOOSTER** eligibility, please refer to the GNB [COVID-19 vaccines \(gnb.ca\)](https://gnb.ca) website for the most up-to-date information for New Brunswick residents.

2023-2024 COVID-19 Products \* **as of the 6<sup>th</sup> of September, 2023**



Supplier	Product name	Age Group	DIN
Pfizer-BioNTech Comirnaty	Bivalent Original and Omicron BA.4/BA.5 (multidose vial)	12 years and older *	02531461
Pfizer-BioNTech Comirnaty	Bivalent Original and Omicron BA.4/BA.5: (multidose vial)	5 - 11 years old *	02533197
Moderna Spikevax	Bivalent Original/Omicron BA. 4/5 (multidose vial)	5 to 11 years old OR 12 years and older *	02532352
Moderna Spikevax	COVID-19 vaccine (multidose vial)	6 months to under 5 years old	02527685
Novavax	Nuvaxovid (multidose vial)	18 years and older *	02525364

\*This vaccine can be administered either as a primary series dose or as a booster dose. Please review the appropriate dosing guidelines based on the context in which you are administering the vaccine. You can find detailed dosing information in **Table 1** of this document: [Interim guidance on the use of bivalent Omicron-containing COVID-19 vaccines for primary series: NACI, June 16, 2023](#)

## 7.2 IN NEW-BRUNSWICK, WHAT IS THE DOSING, INTERVAL AND FREQUENCY OF COVID-19 VACCINES?

### Booster doses:

The recommended interval between booster doses in New-Brunswick is **currently 5 months minimum** since the date of infection or last vaccine dose (whichever is more recent). This interval may change with the launch of the 2023-2024 respiratory season.

When administering COVID-19 vaccines as boosters, please adhere to the dose outlined in the [COVID-19 vaccine: Canadian Immunization Guide - Canada.ca](#)

### Primary series:

- **Monovalent “Original” vaccines:** Follow the schedule and dosages as detailed in the [COVID-19 vaccine: Canadian Immunization Guide - Canada.ca](#).
- **Bivalent vaccines:** Utilize the schedule and dosages specified in **Table 1**, as per the [Interim guidance on the use of bivalent Omicron-containing COVID-19 vaccines for primary series](#) updated on June 16, 2023, by NACI.

### Individuals previously infected with SARS-CoV-2:

- Refer to the [Canadian Immunization Guide \(CIG\) chapter COVID-19 vaccine](#),

## 7.3 WHO SHOULD BE GETTING A COVID-19 VACCINE?

NACI continues to recommend individuals 6 months and older to stay up to date with COVID-19 immunizations, including receiving a primary series. **It is particularly important for those at increased risk of COVID-19 infection or severe disease to stay up to date with the current**

**recommendations.** Please refer to the GNB [COVID-19 vaccines \(gnb.ca\)](https://gnb.ca) website for the most up-to-date information for New Brunswick residents.

Individuals with underlying medical conditions that place them at higher risk of severe COVID-19 should discuss with their health situation with a healthcare provider. Refer to the [Interim guidance on the use of bivalent Omicron-containing COVID-19 vaccines for primary series](#) updated on June 16, 2023, by NACI.

#### **7.4 WHO SHOULD NOT ROUTINELY RECEIVE A COVID-19 VACCINE?**

- Children under 6 months old for their initial vaccine series, and children aged 6 months to 5 years for a booster.
- 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  $\geq 90$  days since diagnosis, whichever is longer.

#### **7.5 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. It remains feasible for individuals with these conditions to still receive a COVID-19 vaccine.

Clear **guidelines** for individuals with confirmed or suspected allergies to components of a COVID-19 vaccine can be found in the 'Contraindications and Precautions' section of the [COVID-19 vaccine Chapter: Canadian Immunization Guide - Canada.ca](#).

#### **7.6 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](#).

#### **7.7 CAN PREGNANT AND BREASTFEEDING WOMEN RECEIVE A COVID-19 VACCINE?**

Yes. All pregnant and breastfeeding women should receive COVID-19 immunization, as evidence demonstrates they are at higher risk of complications from SARS-CoV-2. mRNA vaccines are safe for pregnant and breastfeeding mothers.

### **7.8 CAN THE COVID-19 VACCINE CAUSE SARS-COV-2 ILLNESS?**

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

### **7.9 WHAT ARE THE SIDE EFFECTS OF THE COVID-19 VACCINE?**

Common side effects, just like any other vaccine, are generally 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 very 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).

### **7.10 HOW SOON FOLLOWING COVID-19 IMMUNIZATION DOES PROTECTION DEVELOP AND HOW LONG DOES IT LAST?**

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

### **7.11 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).

### **7.12 ARE COVID-19 VACCINES INTERCHANGEABLE?**

Yes. All COVID-19 vaccine products are interchangeable, regardless of which product was previously received.

### **7.13 ARE THERE "PREFERRED" COVID-19 VACCINE PRODUCTS IN CERTAIN AGE GROUPS?**

For all age groups, mRNA vaccines continue to be the preferred product over Novavax Nuvaxovid due to the availability of data to assess the benefits and risks of mRNA COVID-19 vaccines compared to Novavax Nuvaxovid. Viral Vector vaccines are no longer available.

- **For booster doses:** there is no preference between Pfizer Comirnaty (5 years of age and older) and Moderna Spikevax products (6 years of age and older).
- **For primary series under 30 years of age:** The use of Pfizer-BioNTech Comirnaty is preferred to Moderna Spikevax to start or continue the mRNA primary vaccine series because of a lower reported rate of myocarditis/pericarditis following Pfizer-BioNTech Comirnaty original compared to Moderna Spikevax original.

- **For primary series over 30 years old:** This age group has a lower risk of vaccine-associated myocarditis/pericarditis and either mRNA product is preferred.
- **For individuals who are unable or unwilling to receive an mRNA vaccine:** they may receive a Novavax Nuvaxovid vaccine if they are 18 years of age or older.

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

For guidance on the appropriate actions to take **specifically following a COVID-19 vaccine error** (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.
- **\*NEW\*** as of March 2023, report all errors or near miss incidents in accordance with the New-Brunswick Immunization Program Guide [Policy 2.15 - 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.

#### **7.15 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.

#### **7.16 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](#)

