Medical Directive: Authority to Provide COVID-19 Immunizations by Agency Employed/Contracted Paramedics Working in First Nations Communities in Ontario Region

Medical Directive: CD-Paramedic-IMM-COVID19-002
Activation Date: 17 JAN 2023
Review Due by: 17 JAN 2024

NOTE: This medical directive replaces the previous version dated 14 NOV 2022.

Highlights of Changes:

- Addition of Comirnaty (Pfizer) bivalent vaccine for children aged 5 to 11 years
- Revised definition of "Staying Up to Date"
- Clarification on number of booster doses recommended during the 2022-2023 respiratory season

Sponsoring Person(s)

- James Brooks, MD, FRCPC, Director, Health Protection Unit
- Shari Glenn, NP (PHC), Director, Primary Health Care

NOTE: As there are several COVID-19 vaccines available, providers must be knowledgeable about each vaccine through the manufacturer product monographs as well as current Ontario Ministry of Health guidance documents, including age, eligibility and contraindications.

Delegated Procedure/Order

- The safe and effective administration of COVID-19 vaccines to individuals living/working in First Nations communities in Ontario Region, in accordance with the manufacturer product monographs, FNIHB Ontario Region (OR) Immunization Protocol (which includes the current Canadian Immunization Guide and Regional Policies), the Ontario Ministry of Health COVID-19 Immunization guidelines and directives and the Emergency Health Services: Patient Care Model Standards.
- The management of post-immunization anaphylaxis in a non-hospital setting in accordance with the current Canadian Immunization Guide https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-2-vaccine-safety/page-4-early-vaccine-reactions-including-anaphylaxis.html

Informed Consent

- Paramedics will obtain informed consent as per the Emergency Health Services: Patient Care Model Standards with the additional FNIHB-Ontario Region Immunization Protocol:
  http://www.health.gov.on.ca/en/pro/programs/emergency_health/edu/practice_documents.aspx

  http://www.health.gov.on.ca/en/pro/programs/emergency_health/edu/docs/patient_care_trans_standards_v2.4

  https://www.onehealth.ca/Portals/4/Ontario/PHU/Comm%20Disease/Immuniz/Protocol/2018/Immunization%20Protocol_2018%20with%20Section%201%20Imm%20Service%20Description.pdf?ver=2018-07-23-123430-483

Recipient Clients/Patients

- Individuals, families or groups living/working on First Nations reserves, and those who meet eligibility requirements for vaccines currently offered in Ontario as outlined by Ontario Ministry of Health guidance and individual product monographs.

- Vaccination post COVID-19 infection: There is emerging evidence indicating that a longer interval between COVID-19 infection and vaccination is associated with improved antibody responses to COVID-19 vaccines. A previous COVID-19 infection is defined as a COVID-19 case confirmed by a molecular (e.g., PCR) or rapid antigen test, or symptomatic AND a household contact of a confirmed COVID-19 case. Individuals may receive a COVID-19 vaccine after having completed their isolation and the recommended interval (post infection) has been reached. An individual is still permitted to receive vaccine at the current minimum intervals in the vaccine schedule with informed consent. If an individual meets this definition of infection, it is prudent to inform them of the suggested interval to receive vaccine post infection and document that specific informed consent was provided if the vaccine is administered at a shorter interval than recommended. See Appendix A for specific intervals following infection.

- The National Advisory Committee on Immunization (NACI) and Ontario Ministry of Health recommend the following:
    - Ontario's definition of Staying Up to Date:
        - For those aged 6 months to 4 years, means having a completed primary series.
        - For those aged 5 years and older, means completion of the primary series and receipt of a booster dose (monovalent or bivalent) in the last 6 months.
    - For a primary series:
        - It is preferentially recommended to receive monovalent mRNA COVID-19 vaccines to complete the primary series for all individuals 6 months and older, without contraindications to the vaccine. Please note that individuals 6 months to 4 years who receive Comirnaty (Pfizer) 3 mcg must receive 3 doses to complete their primary series.
    - For booster dose(s):
        - For individuals who are recommended to receive a booster dose, if eligible, bivalent Omicron-containing mRNA COVID-19 vaccine should be offered. If the bivalent COVID-19 vaccine is not readily available, an original mRNA should be offered to ensure timely protection.
    - Please see Ontario Ministry of Health COVID-19 Vaccine Guidance details; https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_administration.pdf

The following information is a summary of current Ontario Ministry of Health COVID-19 mRNA vaccine eligibility. Please refer directly to provincial guidance and product monographs for all vaccine specific information (including COVID-19 non-mRNA vaccine guidance) and age appropriate dosing. For recommended and minimum intervals, see Appendix B.

<u>Vaccines available to children aged 6 months to 4 years of age</u>
Primary Series:

- There is no preferred product for the primary series in immunocompetent individuals
    - Spikevax (Moderna)
    - Comirnaty (Pfizer)
- It is recommended that the same vaccine product be administered for all doses in a primary series, using the dose that is correct for their age at the time of appointment

Vaccines available to children aged 5 to 11

Primary Series:

- For children starting their primary series, Comirnaty (Pfizer) is preferred to minimize the potential myocarditis risk
- For children aged 6-11: Spikevax (Moderna) with explicit informed consent
- Spikevax (Moderna) versus Comirnaty (Pfizer) for individuals 5 to 11
    - For children who started immunization with Spikevax (Moderna) prior to the age of 5 and have now turned 5 years of age prior to receiving their 2nd dose, it is recommended to continue the primary series with an age appropriate dose of Spikevax (Moderna) (25 mcg).
    - For children starting vaccination at age 5, it is preferred to receive Pfizer vaccine. Moderna is still available with explicit informed consent.
    - For children who started their primary series with Spikevax (Moderna) and are now 6 and over, it is recommended to receive Spikevax (Moderna) to complete the series at an increased (and age appropriate) dose of 50 mcg

For Booster Doses:

The age appropriate Comirnaty (Pfizer) bivalent COVID-19 vaccine is the only authorized bivalent product for this age group. If the bivalent vaccine is unavailable, the age appropriate monovalent Comirnaty (Pfizer) vaccine can be used.

Vaccines available to children aged 12 to 17

Primary Series:

- Comirnaty (Pfizer) preferred for ages 12 to 17 to minimize myocarditis risk
- Spikevax (Moderna) with explicit informed consent

For Booster Doses:

- Comirnaty (Pfizer) Bivalent vaccine is the only approved vaccine for booster doses in this age group
- Spikevax (Moderna) Bivalent vaccine may be offered as a booster for individuals 12 to 17 years with moderately to severely immunocompromising conditions. The use of bivalent Moderna in this population is off-label and based on clinical discretion.

Vaccines available to adults aged 18 years and older

Primary Series:

- Comirnaty (Pfizer) is the preferred vaccine in individuals 18 to 29 years of age to minimize myocarditis risk
- For 30 years of age and older, there is no preferred product
- Spikevax (Moderna) is available to those 18 to 29 with explicit informed consent

For Booster doses:

- There is no preferential recommendation between Spikevax (Moderna) bivalent and Comirnaty (Pfizer) bivalent as a bivalent booster dose

Primary Series: Third dose for individuals who are immunocompromised

Individuals who are 6 months of age and older and immunocompromised should receive a third dose of vaccine as part of an extended primary series. As per NACI and Ontario Ministry of Health, for children 6 months to 4 years of age Moderna is the preferred vaccine product due to feasibility of series completion rather than any safety signals observed. A 4-dose primary series with Pfizer has feasibility challenges, including the need to schedule 4 separate appointments and space appointments appropriately relative to other childhood vaccination appointments. If Moderna is unavailable, Pfizer can be administered with an extended 4 dose primary series. For all other age groups the information specific to vaccine product as per age (as listed in the above sections) still applies. Please refer to the Ontario Ministry of Health COVID-19 Vaccine Booster Recommendations document for information specific to who this applies.
https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_administration.pdf

For the 2022-2023 respiratory season (which is defined by Ontario Ministry of Health as on or after September 1, 2022) , the following high risk groups are strongly recommended to receive a bivalent booster dose. This dose should be administered as soon as they are eligible after the minimum three-month interval since their last dose or following symptom onset or a positive COVID-19 infection to stay protected from the most series side effects of COVID-19 during this respiratory season and as individuals spend more time indoors:

- Adults who identify as First Nations, Inuit or Métis and their adult non-Indigenous household members
- Individuals aged 65 and older
- Residents of Elder Care Lodges and individuals living in other congregate settings that are aged 12 and older
- Individuals aged 12 and older with moderately to severely immunocompromising conditions
- Individuals aged 12 and older with an underlying medical condition that places them at high risk of severe COVID-19 infection
- Health care workers
- Pregnant individuals
- Adults in racialized an/or marginalized communities disproportionately affects by COVID-19

For additional information related to high risk groups, see COVID-19 Vaccine Guidance - English (gov.on.ca)

In conclusion:

- This Medical Directive contains only a brief summary of Ontario Ministry of Health COVID-19 Vaccine guidance. The appendices are meant to be additional resources to support your clinical decision making. Appendix A includes guidance on vaccination following COVID-19 infection. Appendix B includes recommended and minimum intervals between COVID-19 vaccine doses. We are grateful to WAHA for developing and sharing the flow chart available in Appendix C. This flow chart is endorsed by the ISC-ON HPU. Appendix D includes a summary table of vaccine product specific information.

For additional information, please refer to current provincial guidance available at:

- COVID-19 Vaccine Guidance - English (gov.on.ca)
- COVID-19 Vaccine-Relevant Information and Planning Resources – Ministry Programs – Health Care Professionals – MOH (gov.on.ca)

Authorized Implementers

The medical directive may be implemented by Paramedics that meet all of the following criteria:

- Are authorized by their regulating body to perform intramuscular injections
- Agency employed/contracted Paramedics working in First Nations communities in Ontario, who are in good standing, with no suspensions.
- Have attended all mandatory immunization education sessions to maintain competency
- Have successfully completed the FNIHB-Ontario Region COVID-19 vaccine(s) mandatory education session(s) specific to the vaccinations being given, including process for reporting of Adverse Events Following Immunization (AEFI)

All Paramedics using this directive must:

- Be knowledgeable about the available/supplied COVID-19 vaccine(s) indications, dosage, administration, contraindications, storage and handling
- Be able to apply their knowledge, judgment and skills in safely administering the COVID-19 vaccine(s) as per Ontario Ministry of Health guidelines for vaccine use
- Remain up-to-date on changes to the COVID-19 vaccine(s) information as updated by the PHAC, the Ontario Ministry of Health, and the FNIHB-Ontario Region
- Remain up-to-date on changes to the FNIHB-Ontario Region Immunization Protocol including the current Canadian Immunization Guide and approved regional policies
- Be knowledgeable and remain up-to-date on the recognition and treatment of Early Vaccine Reactions Including Anaphylaxis found in the Canadian Immunization Guide: Part 2 - Vaccine Safety, available at: https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-2-vaccine-safety/page-4-early-vaccine-reactions-including-anaphylaxis.html
- Be currently certified in cardiopulmonary resuscitation (CPR)
- Have immediate access to an up-to date and complete anaphylaxis kit or required equipment for anaphylaxis management

Guidelines for Implementing the Procedure/Order

Implementation of this medical directive require:

- Upon receipt of vaccine from the local Public Health Unit, highlight in yellow and circle in red ink the date and time indicating the expiry of the vaccine shipment's viability. The vaccine should not be administered after this indicated date and time.
- The vaccine fridge must be monitored twice daily and the results recorded. Any deviations in temperature outside of the acceptable 2 to 8 degrees Celsius will be immediately reported to the Nurse-In-Charge, Nurse Manager, and applicable vaccine supplier/provincial Public Health Unit. The vaccine will not be administered until guidance is received from the Public Health Unit.
- Before preparing and administering vaccine, the expiry date and time of the vaccine must be confirmed by two providers (e.g., two registered nurses, one registered nurse and one paramedic, or two paramedics). The expiry date and time of the unique shipment as well as the expiry date and lot number on the individual vials must be confirmed.
- Ensure the date and time of first puncture are recorded on the vial. Two providers must ensure the date and time and therefore the viability of the vaccine prior to administering.
- Red capped Spikevax (Moderna) COVID-19 vaccine can only be punctured up to 20 times, blue capped Spikevax (Moderna) can only be punctured up to 10 times. There is no puncture limit to the blue capped, green labeled Spikevax (Moderna) Bivalent vaccine. Ensure you are documenting number of punctures. When the maximum amount of punctures is reached, record/document the remaining vaccine in the vial as wastage and discard according to policy.
- Discuss with the recipient or parent/guardian, the benefits and risks of receiving or not receiving the COVID-19 vaccine, and answer questions in order to obtain free and prior informed consent.
- Assess and document allergies and contraindications related to immunization for the vaccine
- Document the intervention and treatment of any Adverse Event Following Immunization (AEFI) according to band policy, the FNIHB-Ontario Region Immunization Protocol, and provincial requirements

Contraindications to the Implementation of this Directive

This medical directive cannot be implemented in the following cases:

- When a client/patient has a contraindication to the vaccine or any component.
- When a client/patient is living in provincially and/or privately funded Health Care facility, for example, Long-Term Care (LTC) facilities, where care is managed and delivered under another physician's where care is managed and delivered under another physician's supervision; immunizations in those facilities would be provided under the authority of the supervising physician and would not be covered by this medical directive.

Documentation and Communication Guidelines

Documentation and communication must be in compliance with the requirements outlined by the authorizing health care professional, the FNIHB-Ontario Region Immunization Protocol, and any additional Provincial documentation related to the specific product(s). For communities that use an electronic medical record (EMR), consent indicated within the EMR will be sufficient.

Quality Assurance and Review Process

- Competencies for safe and effective administration of the Publicly Funded Immunization Schedules for Ontario are provided in the FNIHB-Ontario Region Immunization Orientation and Competency Certification as well as in the FNIHB-Ontario Region Nursing Policy and Practice Manual
- Ongoing immunization competency support is provided via ongoing education sessions, access to updated information at https://www.onehealth.ca/on/ and access to a FNIHB Ontario CD Unit Practice Advisor-Public Health (CD Nurse), CD Unit Practice Consultant-Public Health (Immunization), and FNIHB Nurse Practice Consultant (NPC) as necessary
- This medical directive will be reviewed every year or earlier if needed and revised as required

Approving Physician(s)/Authorizer(s)

James Brooks, MD, FRCPC, Director, Health Protection Unit

Signature:_____ Date: January 17 2023

Administrative Approval(s)

Dawn Bruyere, A/Director, Primary Health Care

Signature:_____ Date: January 19, 2023

Appendix A : Suggested COVID-19 vaccination intervals following COVID-19 Infection

Infection timing relative to COVID-19 vaccination	Population	Suggested interval between infection* and vaccination
Infection prior to completion or initiation of primary vaccination series	Individuals 6 months of age and older who are not considered moderately to severely immunocompromised and with no previous history of multisystem inflammatory syndrome in children (MIS-C)	Receive the vaccine 2 months (56 days) after symptom onset or positive test (if asymptomatic)
	Individuals 6 months of age and older who are moderately to severely immunocompromised and with no previous history of MIS-C	Receive the vaccine dose 1 to 2 months (28 to 56 days) after symptom onset or positive test (if asymptomatic)
	Individuals 6 months of age and older with a previous history of MIS-C (regardless of immunocompromised status)	Receive the vaccine dose when clinical recovery has been achieved or ≥ 90 days since the onset of MIS-C, whichever is longer
Infection after primary series	Individuals currently eligible for booster dose(s)	A 6-month (168 day) interval is recommended and may provide a better immune response, however, a minimum interval of 3 months (84 days) after symptom onset or positive test (if asymptomatic) may be considered in the context of heightened epidemiologic risk, as well as operational considerations for the efficient deployment of vaccine programs (NACI, 2022). For those individuals who fall under the High Risk group previously referenced, it is strongly recommended that they get their booster dose at a shorter interval of 3 months for the 2022-2023 respiratory season

* A previous infection with SARS-CoV-2 is defined as :

- Confirmed by molecular (e.g., PCR) or rapid antigen test; or
- Symptomatic AND a household contact of a confirmed COVID-19 case

The information on timing of vaccination post infection is provided from the Ontario Ministry of Health COVID-19 Vaccine Guidance document;
https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_administration.pdf

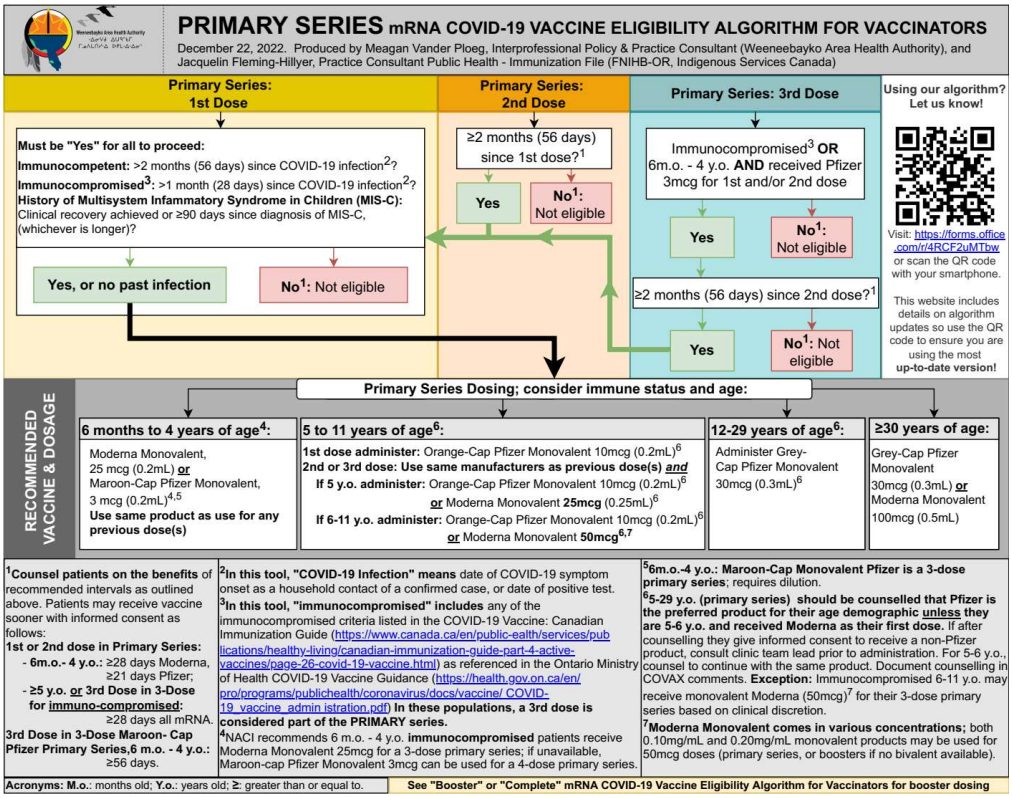
Appendix B : Recommended and Minimum Intervals for COVID-19 Vaccination

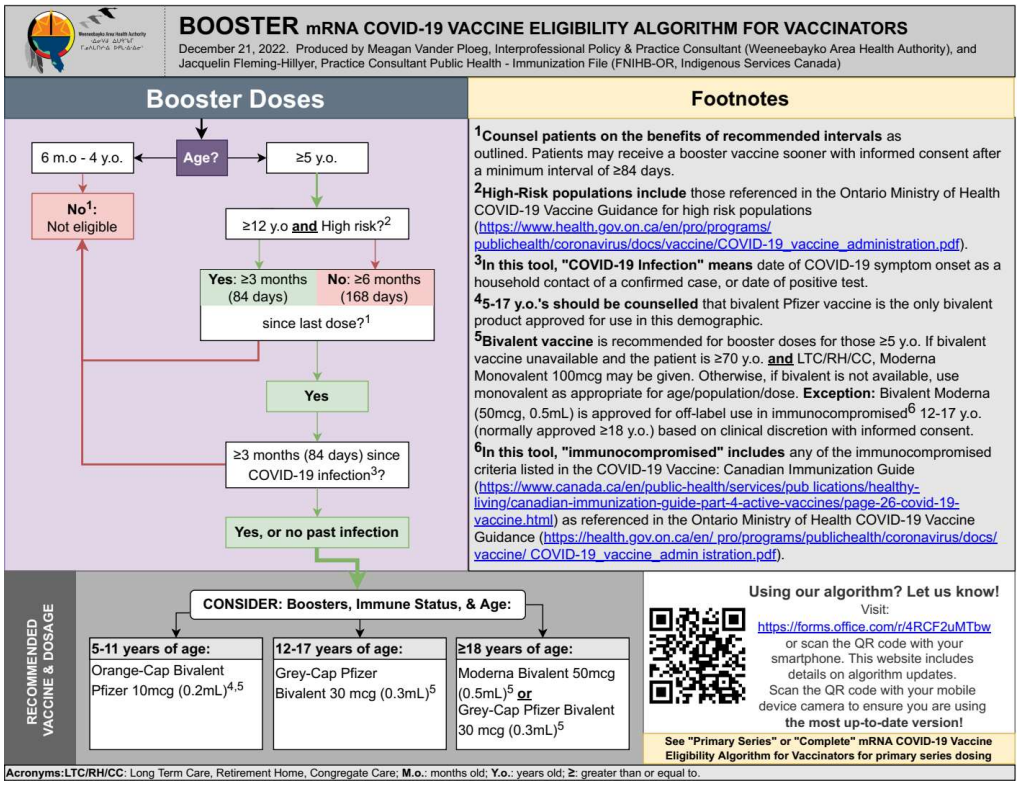
Age	Recommended Intervals[1]	Minimum Intervals
6 months to 4 years	**Primary Series** Monovalent Pfizer-BioNTech (3 mcg) • 2nd dose, 56 days after 1st dose • 3rd dose, 56 days after 2nd dose Monovalent Moderna (25 mcg) • 2nd dose, 56 days after 1st dose **Booster Doses** - not eligible	**Primary Series** Monovalent Pfizer-BioNTech (3 mcg) • 2nd dose, 21 days after 1st dose • 3rd dose, 56 days after 2nd dose Monovalent Moderna (25 mcg) • 2nd dose, 28 days after 1st dose **Booster Doses** - not eligible
Immunocompromised individuals 6 months to 4 years	**Primary Series** Monovalent Pfizer-BioNTech (3 mcg) • 2nd dose, 56 days after 1st dose • 3rd dose, 56 days after 2nd dose • 4th dose, 56 days after 3rd dose Monovalent Moderna (25 mcg) • 2nd dose, 56 days after 1st dose • 3rd dose, 56 days after 2nd dose **Booster Doses** – not eligible	**Primary Series** Monovalent Pfizer-BioNTech (3 mcg) • 2nd dose, 21 days after 1st dose • 3rd dose, 56 days after 2nd dose • 4th dose, 56 days after 3rd dose Monovalent Moderna (25 mcg) • 2nd dose, 28 days after 1st dose • 3rd dose, 28 days after 2nd dose **Booster Doses** – not eligible
5 years and older	**Primary Series** • 2nd dose, 56 days after 1st dose **Booster Doses** 6 months (168 days) after last dose	**Primary Series** • 2nd dose, 28 days after 1st dose **Booster Doses** 3 months (84 days) after last dose
Immunocompromised individuals 5 years and older	**Primary Series** • 2nd dose, 56 days after 1st dose • 3rd dose, 56 days after 2nd dose **Booster Doses** 6 months (168 days) after last dose	**Primary Series** • 2nd dose, 28 days after 1st dose • 3rd dose, 28 days after 2nd dose **Booster Doses** 3 months (84 days) after last dose
Individuals who fall under High Risk Groups for the 2022-2023 respiratory season	**Primary Series** Follow interval above **Booster Doses** 3 months (168 days) after last dose.	**Primary Series** Follow interval above **Booster Doses** 3 months (168 days) after last dose.

[1]There is good evidence that longer intervals between the first and second doses of COVID-19 vaccines result in more robust and durable immune response and higher vaccine effectiveness and may be associated with a lower risk of myocarditis and/or pericarditis in adolescents and young adults. See the Canadian Immunization Guide for more information.

The information on recommended and minimum intervals has been provided from the Ontario Ministry of COVID-19 Vaccine Guidance document. For additional information, see Table 1 : Age Categories and Intervals for COVID-19 Vaccination:
https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_administration.pdf

Appendix C: WAHA mRNA COVID-19 Vaccine Eligibility Algorithm for Vaccinators





Note : this document is also available in pdf form on One Health.

Appendix D : Vaccine Product Quick Reference Guide

The following information is a summary of vaccine products and does not reflect current vaccine eligibility, for additional information please refer to the current Ontario Ministry of Health Guidance and individual product monographs.

Please note: the column for purple cap monovalent Pfizer was removed since it is no longer available in Ontario and replaced by the gray cap monovalent Pfizer. The columns for Nuvaxovax (Novavax) and Janssen (Johnson and Johnson) have been removed from this table for space reasons. These vaccines should only be used in exceptional cases but remain available. Detailed information continues to be found in the previously referenced Ontario Ministry of Health COVID-19 Vaccine Guidance. The column for Covifenz (Medicago) has been removed since this vaccine is no longer available in Ontario.

COVID-19 Vaccine Product Name	COMIRNATY (Pfizer-BioNTech)	COMIRNATY (Pfizer-BioNTech)	COMIRNATY (Pfizer-BioNTech)	SPIKEVAX (Moderna)	COMIRNATY **Bivalent** (Pfizer-BioNTech)	SPIKEVAX **Bivalent** (Moderna)	COMIRNATY **Bivalent** (Pfizer-BioNTech)
Physical Details of vial:	Maroon cap/label border	Orange cap/label border	Gray cap/label border	Red cap – 0.20 mg/mL Blue cap – 0.10 mg/mL (hence the alternating colour coding)	Orange cap/label border AND product names states bivalent.	royal blue cap and green label	Gray cap/gray label border AND product name states bivalent.
Type	mRNA - monovalent	mRNA - monovalent	mRNA - monovalent	mRNA - monovalent	mRNA – bivalent	mRNA - bivalent	mRNA - bivalent
Authorized age for use	6 months to < 5 years	5 to 11 years of age * see provincial guidance for preferred vaccine based on age and previous vaccine doses	≥12 years of age	≥ 6 months of age * see provincial guidance for preferred vaccine based on age and previous vaccine doses	5 to 11 years of age	≥ 18 years of age	≥12 years of age
Dose/ Route	3 mcg (0.2 mL)	10 mcg (0.2 mL, IM)	30 mcg (0.3 mL IM)	Note: **Moderna monovalent vaccine is now available in two different concentrations** Aged 6 months to 5 years: primary series should be obtained from the blue cap (0.10 mg/mL) vial only 25 mcg, IM or 0.25 mL (blue cap) Aged 6-11: primary series can be obtained from the blue cap (0.10 mg/mL) or red cap (0.20 mg/mL) vial 50 mcg, IM or 0.50 mL (blue cap) 50 mcg, IM or 0.25 mL (red cap)	10 mcg (0.2 mL, IM)	50 mcg (0.5 mL IM)	30 mcg (0.3 mL)

				12+ years of age: primary series should be obtained from the red cap (0.20 mg/mL) vial only 100 mcg, IM or 0.50 mL (red cap)			
Format	Multi-dose vial: 10 dose vials	Multi-dose vial: 10 dose vials	Multi-dose vial: 6 dose vials	Multi-dose vial : Red cap – 0.20 mg/mL Blue cap – 0.10 mg/mL	Multi-dose vial: 10 dose vials	Multi-dose vial: 5 doses	Multi-dose vial: 6 doses per vial
Dilute	Yes Each vial diluted with 2.2 mL 0.9% sodium chloride injection USP. See product monograph for more Information	Yes Each vial diluted with 1.3 mL 0.9% sodium chloride injection USP. See product monograph for more Information	No **DO NOT DILUTE**	No	Yes Each vial diluted with 1.3 mL 0.9% sodium chloride injection USP. See product monograph for more information	No	No **DO NOT DILUTE**
Potential allergen *any component of the vaccine could be a potential allergen	Polyethylene glycol (PEG) Tromethamine (Tromethamol or Tris)	Polyethylene glycol (PEG) Tromethamine (Tromethamol or Tris)	Polyethylene glycol (PEG) Tromethamine (Tromethamol or Tris)	Polyethylene glycol (PEG) Tromethamine (Tromethamol or Tris)	Polyethylene glycol (PEG) Tromethamine (Tromethamol or Tris)	Polyethylene glycol (PEG) Tromethamine (Tromethamol or Tris)	Polyethylene glycol (PEG) Tromethamine (Tromethamol or Tris)
Storage: Pre puncture (for storage at frozen state, please see product monograph)	10 weeks at 2°C to 8°C Vaccine is stable at room temperature (8°C to 25°C) for no more than 12 hours prior to first puncture (including any thaw time)	10 weeks at 2°C to 8°C Vaccine is stable at room temperature (8°C to 25°C) for no more than 12 hours prior to first puncture (including any thaw time)	10 weeks at 2°C to 8°C Vaccine is stable at room temperature (8°C to 25°C) for no more than 12 hours prior to first puncture (including any thaw time)	30 days at 2°C to 8°C 24 hours at room temperature (8°C to 25°C)	10 weeks at 2°C to 8°C Vaccine is stable at room temperature (8°C to 25°C) for no more than 12 hours prior to first puncture (including any thaw time)	30 days at 2°C to 8°C 24 hours at room temperature (8°C to 25°C)	10 weeks at 2°C to 8°C Vaccine is stable at room temperature (8°C to 25°C) for no more than 12 hours prior to first puncture (including any thaw time)
Storage: Post Puncture	Discard after 12 hours Can be stored between 2°C to 25°C	Discard after 12 hours Can be stored between 2°C to 25°C	Discard after 12 hours Can be stored between 2°C to 25°C	24 hours Can be stored between 2°C to 25 °C Regardless of puncture, Moderna vaccine can only be stored at room temperature (8°C to 25°C) for a total of 24 hours. Any time spent between (8°C to 25°C) should be tracked and not exceed 24 hours cumulatively	Discard after 12 hours Can be stored between 2°C to 25°	24 hours Can be stored between 2°C to 25 °C Regardless of puncture, Moderna vaccine can only be stored at room temperature (8°C to 25°C) for a total of 24 hours.	Discard after 12 hours Can be stored between 2°C to 25°

				Each Moderna monovalent vial has puncture limits: Red cap – 20 puncture limit Blue cap – 10 puncture limit		Any time spent between (8°C to 25°C) should be tracked and not exceed 24 hours cumulatively	
Product Monograph (Health Canada)	https://covid-vaccine.canada.ca/info/pdf/pfizer-biontech-covid-19-vaccine-pm1-en.pdf	https://covid-vaccine.canada.ca/info/pdf/pfizer-biontech-covid-19-vaccine-pm1-en.pdf	https://covid-vaccine.canada.ca/info/pdf/pfizer-biontech-covid-19-vaccine-pm1-en.pdf	https://covid-vaccine.canada.ca/info/pdf/covid-19-vaccine-moderna-pm-en.pdf	https://covid-vaccine.canada.ca/info/pdf/comirnaty-original-omicron-ba4ba5-pm-en.pdf	https://covid-vaccine.canada.ca/info/pdf/spikevax-bivalent-en.pdf	https://covid-vaccine.canada.ca/info/pdf/comirnaty-original-omicron-ba4ba5-pm-en.pdf

Note : this document is also available in pdf form on One Health