COVID 19 Vaccine Ir	nplementation Task Force
Clinic Reference	
Title:	COVID-19 Vaccine Pfizer COMIRNATY™ Quick Reference for Immunizers
Area:	Reference for Immunizers
Effective Date:	January 15, 2021 (Adult formulation), November 25, 2021 (Pediatric formulation), October 7, 2022 (Bivalent formulation) October 21, 2022 (Infant formulation)
Revised Date:	October, 2022
Approver:	FINAL

Pfizer COMIRNATYTM vaccine indicated for active immunization against coronavirus disease 2019 (COVID-19)

Disclaimer: this Quick Reference is not intended to replace other product specific vaccine references. The document is intended a quick reference for frequently referred to information. Please refer to the product monograph and other Pfizer COMIRNATY[™] specific resources for all current and complete information.

Additional resources:

Product Monograph: https://www.gov.mb.ca/asset_library/en/covidvaccine/pfizer-biontech-pm.pdf

Bivalent Product Monograph: https://www.gov.mb.ca/asset_library/en/covidvaccine/pfizer-cominarty-bivalent-ba4-5-pm.pdf

Eligibility Criteria:

Please refer to Province of Manitoba | Eligibility Criteria (gov.mb.ca) for the most up to date information on primary series and booster dose eligibly criteria.

Canadian Immunization Guide:

For the guidance on special populations, please refer to and follow guidance in the Canadian Immunization Guide.

Fact Sheets:

For information on vaccine risk and intended benefits, please refer to the <u>Provincial factsheets</u>

Summary of document tables:

Table 1: Additional dose recommendations: immunocompromised

Table 2: Additional dose recommendations: non-Health Canada approved

Table 3: Manitoba Health recommended mRNA immunization schedule, based on age.

Table 4: Storage and Handling of Manitoba approved COVID-19 vaccines

Table 5: Bivalent Considerations

Product Information	Approved immunization intervals	Presentation	Clinic Setting Considerations	Administration		
6 months to ≤ 5 years of	age					
Primary series: Individuals 6 months to ≤5 years of age:	Primary series intervals Recommended Interval: 8 weeks between all doses	Cap: Maroon Vial volume: 0.4 ml	Thaw time*: 2º to 8ºC (Refrigerator): up to 2 hours/carton.	Administered: In	ntramuscular n (0.9% Sodium Chl	oride Injection.
3 dose regimen of 0.2mL (3 mcg)	Authorized Interval:	(multidose vial) Requires dilution	15° to 25° C (Room temperature): 30 min	USP 2.2 mL requ	ired for dilution)	-
Note: An extended primary series is recommended for	21 days Minimum Interval:	After dilution, one vial contains 10 doses of 0.2	Let stand at room temperature 30 min prior to dilution.		muscular needle le months to under	_
those who are moderately to severely	Between dose 1 and dose 2: 19 days	ml. Dose : 3 mcg (0.2ml)	Discard time:	AGE	SITE	NEEDLE LENGTH
immunocompromised. See table 1 for preferential	Between dose 2 and dose 3: 52 days	Inchest violes After	Undiluted: 12 hours at room temperature.	Infants (6 to 12 months)	Anterolateral thigh	1"
recommendation. Children living in First Nation communities: Moderna 25mcg is the preferred vaccine due to being a 2-dose series instead of a 3-dose series.		Inspect vials: After dilution, the vaccine will be a white to off-white suspension. Inspect vials to confirm there are no particulates and no discolouration is observed.	refrigerate or store at room temperature for maximum 12 hours	Young children (12 months to 3 years)	Deltoid	5/8" to 1"
				Young children (12 months to 3 years)	Anterolateral thigh	At least 1"
However, Pfizer 3mcg can also be used for this age			12 hours after dilution.	Children 3+	Deltoid	5/8" to 1"
group. Booster dose: Not approved for this age group			Thawed vials can be handled in room light conditions.		e syringes and/or n .0 doses from a sing	
Potential allergens: Polyethy	See Table 3 (Recommended mRNA schedule)		*Do not refreeze once thawed		t formulation to pr rs of age and older	•

NACI recommends children 6 months to ≤ 5 years should start and finish the primary series with the same product. If mixed products are used, the Pfizer interval schedule should be used (3 doses for immunocompetent, 4 doses for immunocompromised).

Product Information	Approved immunization intervals	Presentation	Clinic Setting Considerations	Administration
5 years to ≤ 11 years of ag	ge			
Primary series:	Primary series intervals Recommended Interval:	Cap: Orange	Thaw time*:	Administered: Intramuscular
Individuals 5 years to ≤11 years of	8 weeks	Vial volume: 1.3 ml	2° to 8°C (Refrigerator): up to 4 hours/carton.	
age: 2 dose regimen of 0.2mL (10 mcg)	o weeks	(multidose vial)	15° to 25° C (Room	Requires dilution (0.9% Sodium
2 dose regimen or o.zmic (10 mcg)	Authorized Interval:	Requires dilution	temperature): 30 min	Chloride Injection, USP 1.3 mL
Note: 3 rd dose may be	21 days	Requires unation	temperature).	required for dilution)
recommended for some individuals.	21 days	After dilution, one vial	Let stand at room temperature	required for unation,
See table 2	Minimum Interval:	contains 10 doses of 0.2 ml.	30 min prior to dilution.	Site: deltoid
000 00000 1	19 days	Dose : 10 mcg (0.2ml)	and the second second	
Boosters*:		_ = ===================================	Discard time:	Needle length:
Individuals 6 to 11 years of age:	Booster dose intervals:		Undiluted:	5/8" to 1 ½"
	Recommended Interval:	Inspect vials: After dilution,	12 hours at room temperature.	Clinical judgement should be used
One dose: 0.2ml (10mcg)	6 months	the vaccine will be a white to	·	when selecting needle length for IM
ν ο,		off-white suspension. Inspect	Once the vial has been	injections. Consider clients weight,
	Minimum Interval:	vials to confirm there are no	diluted/punctured, refrigerate	age, gender and muscle mass.
	*3 months	particulates and no	or store at room temperature	
		discolouration is observed.	for maximum 12 hrs, then	
			discard.	Low dead-volume syringes and/or
				needles should be used to extract
			Thawed vials can be handled in	10 doses from a single vial.
			room light conditions.	
*Entire cohort eligible, but	*For those who identify		*Do not refreeze once thawed	Do not use pediatric formulation to
recommended for those at high	as being at increased risk			prepare doses for individuals 12
risk of severe outcomes from	See Table 3			years of age and older.
COVID-19 infection.	(Recommended mRNA			
	schedule)			
Potential allergens: Polyethylene gly	col (PEG), Tromethamine (t	rometamol or Tris)		
Product is latex and preservative free	2			

NOTE: If more than the expected number of doses are drawn from a vaccine vial (greater than 6 or greater than 10 doses depending on formulation, vaccine may be administered, provided the full dose can be drawn from one vial (do not pool vaccine from multiple vials), all infection control practices have been maintained, and inventory is updated accordingly.

Product Information	Approved immunization intervals	Presentation	Clinic Setting Considerations	Administration
≥ 12 years of age and older				
Primary Series:	Primary series Intervals	Cap: Purple	Thaw time*: 2° to 8°C (Refrigerator): up to 3	Administered: Intramuscular
Individuals ≥ 12 years of age:	Recommended	Vial volume: 0.45 ml	hours/carton.	Requires dilution (0.9% Sodium
2 dose regimen of 0.3ml (30 mcg)	Interval: 8 weeks	(multidose vial)	15° to 25° C (Room temperature):	Chloride Injection, USP 1.8 mL required for dilution)
Note: 3 rd dose may be recommended	Authorized Interval:	Requires dilution	30 111111	required for dilution)
for some individuals. See table 2	21 days	Requires anation	Let stand at room temperature	Site: deltoid
Joi some marviaduis. See table 2	21 days	After dilution, one vial	30 min prior to dilution.	Site. deitoid
Booster doses:	Minimum Interval:	contains 6 doses of 0.3ml	30 mm prior to dilution.	Needle length:
booster doses.	19 days	contains o doses of o.sim	Must be diluted within 2 hours of	5/8" to 1 ½"
Individuals ≥ 12 years of age:	19 days	Dose : 30 mcg (0.3ml)	exposure to room temperature.	Clinical judgement should be
Dose: 0.3ml (30 mcg)	Booster dose intervals:	Dose. 30 fficg (0.3ffii)	exposure to room temperature.	used when selecting needle
Dose. 0.3111 (30 fficg)	Recommended	Inspect vials: After dilution,		length for IM injections.
	Interval: 6 months	the vaccine will be a white to	Discard time:	Consider clients weight, age,
	interval. o months	off-white suspension. Inspect	Undiluted:	gender and muscle mass.
	Minimum Interval:	vials to confirm there are no	12 hours at room temperature.	gender and muscle mass.
	*3 months	particulates and no	12 hours at room temperature.	
	3 1110111113	discolouration is observed.	Once the vial has been	Low dead-volume syringes
		discolouration is observed.	diluted/punctured, refrigerate or	and/or needles should be used
			store at room temperature for	to extract 6 doses from a single
			maximum 6 hrs, then discard.	vial.
			maximum 6 ms, then discard.	vidi.
			The consideration of the beautiful to	
			Thawed vials can be handled in	
	*======================================		room light conditions.	
	*For those who		*Do not refreeze once thawed	
	identify as being at			
	increased risk			
	See Table 3			
	(Recommended mRNA			
	schedule)	<u></u>		<u> </u>
Potential allergens: Polyethylene glycol	(PEG). This product does N	IOT contain Fromethamine.		
Product is latex and preservative free				

Product Information	Approved immunization intervals	Presentation	Clinic Setting Considerations	Administration
Bivalent: ≥ 12 years of age and older				
Not for use as primary series Booster dose: Individuals 6 to 11 years of age: Not approved for this age group. Individuals ≥ 12 years of age: One dose 0.3ml (30mcg) Current eligibility criteria available online: https://www.gov.mb.ca/covid19/vaccine/eligibility-criteria.html	Recommended Interval: 6 months Minimum Interval: *3 months	Vial volume: 2.25 ml (6 doses in a multidose vial) Does NOT require dilution Dose: 30 mcg (0.3ml) Inspect vials: Prior to mixing, the thawed vaccine may contain white to off-white opaque amorphous particles. After mixing, the vaccine should appear as a white to off-white suspension with no visible particles.	Thaw time*: 2° to 8°C (Refrigerator): up to 6 hours/carton. 15° to 25°C (Room temperature): 30 min Discard time: 12 hours at room temperature after first puncture. Vaccine should be administered immediately after being drawn into the syringe. If this is not possible (i.e. using pre-drawn syringes) the vaccine must be administered within 12 hours of when the vial was punctured. Example: if the vial is punctured at 8 am (expires at 8pm), and the syringe is	Administered: Intramuscular Does NOT require dilution Site: deltoid Needle length: 5/8" to 1 ½" Clinical judgement should be used when selecting needle length for IM injections. Consider clients weight, age, gender and muscle mass. Low dead-volume syringes and/or needles should be used to extract 6 doses from a single vial.
	*For those who identify as being at increased risk See Table 3 (Recommended		drawn at 6pm, the syringe must be discarded at 8pm with the vial. *Do not refreeze once thawed	
Potential allergens: Polyethylene glycol (PEG), Trome	mRNA schedule)	If individual is 12 and has a line	un allarguta Transathania	thoughould be offered -

Potential allergens: Polyethylene glycol (PEG), Tromethamine (trometamol or Tris). If individual is 12+ and has a known allergy to Tromethamine they should be offered a <u>Pfizer monovalent (purple cap)</u> vaccine for their booster dose.

Product is latex and preservative free

See Table 5: Bivalent Considerations for detailed information about bivalent recommendations and administration.

Recommendations on COVID-19 Immunization Doses for the Primary Series:

- Children who will turn from 4 to 5 years of age between their doses in the vaccination series should receive their age-appropriate dose at the time of the vaccination and the interval between doses is determined by the child's age at the start of the vaccination series.
- Children that are 5 years of age should initiate the pediatric Pfizer COMIRNATY™ primary series.
- For children 6 years to 11 years of age, the use of Pfizer COMIRNATY TM (10mcg) is preferred to Moderna Spikevax (50 mcg) to start or continue the primary vaccine series.
- Manitoba recommends that young people age 12 29 years receive Pfizer COMIRNATY™ for their primary series to minimize the rare potential increased risk of myocarditis/pericarditis
- A person who received a first dose of an mRNA vaccine (COMIRNATY™ or SPIKEVAX™) should be offered the same mRNA vaccine for their second dose.
 - o If the same mRNA vaccine is not available or unknown, another mRNA vaccine can be considered interchangeable and should be offered to complete the vaccine series.
 - If a different mRNA vaccine is given as a second dose with appropriate spacing, both doses are considered valid and the series complete.
- While the **recommended** interval for the primary series, of 8 weeks is preferred, if a person presents for an immunization and would otherwise not return within that recommended interval, the immunizer may proceed with administering the subsequent dose if the **authorized minimum** interval has passed, provided the first dose product received was an mRNA vaccine (COMIRNATY™ or SPIKEVAX™).
 - o The **minimum** interval of 19 days is not recommended; however, would be considered a valid dose in PHIMS.
- Individuals who are moderately to severely immunocompromised are recommended to receive a third dose in the primary series. This requires a prescription if given outside of a physician or pharmacists office and must be given at least 28 days after the second dose.

Recommendations on COVID-19 Immunization Booster doses:

- The recommended interval for booster doses is 6 months between the most recent dose (primary series, previous booster dose) and the eligible booster. However, a booster dose may be administered using a 3-month interval after discussing the risk and benefits of a shortened interval with the client.
- It is recommended for individuals to wait 6 months since their last COVID-19 infection. At minimum, they need to be fully recovered and completed their isolation period before receiving a booster dose.
- Individuals who have already received an mRNA COVID-19 vaccine as part of a fall COVID-19 vaccine booster program will not be eligible for an additional dose of a COVID-19 vaccine at this time. This includes individuals who were vaccinated using any authorized original or bivalent mRNA COVID-19 vaccine. Both original and bivalent mRNA COVID-19 vaccines will boost immune responses and are likely to provide significant protection against hospitalization and severe disease.
- See **Table 5: Bivalent Considerations** for detailed information about bivalent recommendations and administration.

NOTE: The date the first vaccine was administered is considered "day 0" when counting minimum intervals. Interruption of a vaccine series resulting in a greater than recommended interval between doses does not require restarting the series.

Allergies:

Refer to Manitoba COVID-19 Vaccine: Clinical Practice Guidelines for Immunizers and Health Care Providers – Appendix C for precautionary information on national guidance related to allergic responses to vaccines.

Table 1 (Pfizer Additional dose {primary series} recommendation, immunocompromised)

Additional dose recommendations for those moderately to severely							
immunocompromised Cohort Product Dose Recommended interval							
6 months to ≤ 5 years	Moderna (25mcg) *preferred	• 3 dose series	≥ 28 days between all doses in a 3 or 4 dose series. Considered part of the primary series.				
	Pfizer (3mcg) Maroon cap	• 4 dose series	or the primary series.				
5 to 11 years	Pfizer (10mcg) Orange cap	• 3 dose series	≥ 28 days after their second dose. Considered part of the primary series.				
≥ 12 years	Pfizer (30mcg) Purple cap	• 3 dose series	≥ 28 days after their second dose. Considered part of the primary series.				

^{*}A 3 dose series of Moderna/SpikevaxTM (25mcg) vaccine should be preferentially offered to this age group for the extended series due to the shorter 3 dose regimen, instead of 4 doses of Pfizer/ComirnatyTM (3mcg).

Table 2 (Pfizer Additional dose {primary series} recommendation, non-Health Canada approved)

Additional dose approved vacci		for individuals with 1 or 2	Manitoba Health accepted primary series combinations	
Cohort	Product	Dose	Recommended interval	Two mRNA vaccines (Pfizer or Moderna)
6 months to ≤ 5 years	to ≤ 5 Moderna (25mcg)	 Two AstraZeneca vaccines AstraZeneca and one dose of an mRNA vaccine (Pfizer or Moderna) 		
	Pfizer (3mcg) Maroon cap	administer 2 additional doses	8 weeks apart, starting ≥ 21 days after their last dose to complete their primary series.	 One dose of Janssen Three non-Health Canada Approved vaccines One or two non-Health Canada Approved Vaccines and one dose of an mRNA Vaccine (Pfizer or Moderna) For moderately to severely immunocompromised
5 to 11 years	Pfizer (10mcg) Orange cap	administer one additional dose	≥ 28 days after their last dose to complete their primary series.	 Three doses (any combination of AstraZeneca,
≥ 12 years	Pfizer (30mcg) Purple cap	administer one additional dose	≥ 28 days after their last dose to complete their primary series.	approved vaccine.

Table 3 Manitoba Health recommended mRNA immunization schedule, based on age.

	Approved COVID-19 mRNA vaccine for primary series	Time between doses of primary series/# of doses	Immunosuppressed: Time between doses of primary series/# of doses	Time between most recent dose and any eligible booster dose	Approved COVID-19 mRNA vaccines for booster doses
Infants and children aged 6 months to 4 years	Moderna/Spikevax [™] (25mcg) Or Pfizer/Comirnaty [™] (3mcg)	8 weeks 2 doses (Moderna) 3 doses (Pfizer)	4 to 8 weeks between each dose 3 doses (Moderna)+ 4 doses (Pfizer)	Not eligible	Not eligible
Children aged 5 years *	Pfizer/Comirnaty ™ (10mcg) or Moderna/Spikevax™ (25mcg)	8 weeks 2 doses	4 to 8 weeks between each dose 3 doses	6 months	Pfizer/Comirnaty [™] (10mcg) mRNA vaccine
Children aged 6 to 11 years *	Pfizer/Comirnaty ™ (10mcg) or Moderna/Spikevax™ (50mcg)	8 weeks 2 doses	4 to 8 weeks between each dose 3 doses	6 months	Pfizer/Comirnaty™ (10mcg) mRNA vaccine
Youth aged 12 to 17 years *	Pfizer/Comirnaty [™] (30mcg) or Moderna/Spikevax [™] (100mcg)	8 weeks 2 doses	4 to 8 weeks between each dose 3 doses	6 months	Pfizer/Comirnaty™ Bivalent vaccine ** or Pfizer/Comirnaty ™ (30mcg) or Moderna/Spikevax™ (50/100mcg)
Adults aged 18 to 29 years *	Pfizer/Comirnaty [™] (30mcg) or Moderna/Spikevax [™] (50mcg/100mcg)	8 weeks 2 doses	4 to 8 weeks between each dose 3 doses	6 months	Pfizer/Comirnaty™ Bivalent vaccine Moderna/Spikevax™ Bivalent vaccine** or Pfizer/Comirnaty™ (30mcg) or Moderna/Spikevax™ (50mcg/100mcg)
Adults aged 30 years and older	Pfizer/Comirnaty [™] (30mcg) or Moderna/Spikevax [™] (50mcg/100mcg)	8 weeks 2 doses	4 to 8 weeks between each dose 3 doses	6 months	Pfizer/Comirnaty ™ Bivalent vaccine Moderna/Spikevax ™ Bivalent vaccine ** or Pfizer/Comirnaty ™ (30mcg) or Moderna/Spikevax™ (50mcg/100mcg)

⁺ Moderna/SpikevaxTM is the recommended mRNA vaccine for <u>Immunocompromised</u> Infants and children 6 months to 4 years.

NOTE: Moderna/Spikevax[™] **100mcg** is offered as a primary series to individuals age 12 and older and as a booster dose to individuals at increased risk of severe illness. Moderna/Spikevax[™] **50mcg** is offered as a booster dose to individuals age 12 and older who are not at risk of severe illness.

^{*} Pfizer/Comirnaty ™ is the recommended mRNA vaccine for the primary series for individuals 5 to 29 years.

^{**}A bivalent Omicron-containing mRNA COVID-19 vaccine is the preferred booster product (there is no evidence that one bivalent vaccine is more effective than the other).

Table 4 Storage and handling of Manitoba COVID-19 approved vaccines (Pfizer)

COVID-19 Vaccine Product and Approved Age Indication	Ultra Low Freezer Storage Time (-90°C to -60°C) [‡]	Freezer Storage Time (-25°C to -15°C)	Refrigerated Storage Time Before Dilution or Puncture (+2°C to +8°C)^	Room Temperature Time Before Dilution or Puncture (+8°C to +25°C)	After Dilution or Puncture Time (+2°C to +25°C)
PFIZER					
Pfizer Pediatric (Comirnaty™) 5-11 years of age Orange Cap	12 months from the date of manufacture	Do not store at this temperature	10 weeks within the 12-month shelf life. Document 10-week expiry on carton.	12 hours prior to dilution	Must be used within 12 hours after dilution
Pfizer (Comirnaty™) 12 years of age and older Purple Cap	Until expiry date printed on label	2 weeks	1 month prior to dilution	2 hours prior to dilution (including thaw time)	Must be used within 6 hours after dilution
Pfizer (Comirnaty TM) 6 months to 5 years Maroon Cap	12 months from the date of manufacture	Do not store at this temperature	10 weeks within the 12- month shelf life. Document 10-week expiry on carton.	12 hours prior to dilution	Must be used within 12 hours after dilution
Pfizer (Comirnaty™) Bivalent ≥12 years Grey Cap	12 months from the date of manufacture	Do not store at this temperature	10 weeks within the 12- month shelf life. Document 10-week expiry on carton.	12 hours prior to puncture. DO NOT DILUTE	Must be used within 12 hours after puncture. DO NOT DILUTE

Note: Most vaccines are distributed to providers at +2°C to 8°C (refrigerated temperature). Thawed or partially thawed vaccines cannot be refrozen.

- During storage, minimize exposure to room light, and avoid exposure to direct sunlight and ultraviolet light.
- Product should be marked with applicable expiry dates based on time in refrigerator and time after puncture to avoid administration errors. Please refer to the product monographs for all storage and handling guidelines
- Vaccine that is expired or cannot be used if it has reached past the identified timelines are to be removed from storage, deducted from any inventory (if applicable) and returned to MDA for proper disposal following Manitoba's Return Policy and Process (https://www.gov.mb.ca/health/publichealth/cdc/div/docs/vbrpp.pdf
- Regardless of storage condition, vaccine should not be used after 12 months from the date of manufacture printed on the vial and cartons.

Table 5 Bivalent Considerations

COVID-19 Bivalent (Omicron) booster vaccine considerations:

There are two COVID-19 mRNA bivalent Omicron-containing products available in Manitoba. Assisting the client to make an informed decision about which product is best for them can be a complex task. Please use the information provided below to help guide the informed consent process.

Key considerations:

- The bivalent vaccines contain two different mRNA components, based on the original strain and the omicron strain of SARS-CoV-2 virus.
- The bivalent vaccines help boost the immune system, creating more antibodies to fight COVID-19. Research shows they give strong protection from severe illness or hospitalization and lower the risk of symptoms and long-term complications caused by COVID-19 infection.
- Both bivalent products have been authorized for use as a booster dose and are not to be used for a primary series.
- The side effects of the bivalent are similar to the monovalent mRNA vaccines and usually mild.

Eligibility considerations:

- The bivalent Omicron-containing mRNA vaccines are the preferred booster products for those that are eligible to receive them.
- NACI recommends that all individuals 12 years of age older and especially those who are at increased risk of severe illness, may be offered a fall COVID-19 booster dose, regardless of the number of booster doses previously received. *NACI recommendations can be viewed here.*
- Everyone 12 years of age and older, who has completed their primary series should be offered a bivalent booster.
- Individuals who already received an mRNA COVID-19 vaccine as a fall booster dose will <u>not</u> be eligible for additional COVID-19 booster doses at this time. This includes the original monovalent vaccine and either bivalent vaccine.

There is no evidence indicating one bivalent vaccine is more effective than the other.

	12 to 17	≥ 18	Intervals	Additional considerations:
	years	years		Providers must ensure that the appropriate vaccine is available when
Pfizer (Comirnaty [™]) Bivalent ≥12 years	~	~	Recommended Interval: 6 months Minimum Interval: 3 months The vaccine intervals are more	offering clinics that include the 12 to 17 age cohort, as they are only eligible to received the Pfizer/Comirnaty™ bivalent product. • If there is no preference stated by the client, consider offering the product that will result in the least wastage.
Moderna (Spikevax™) Bivalent ≥18 years	×	~	important than which product the client receives. Those at higher risk should be immunized as early as possible.	 If the client has a strong preference for one product, do not deny access to it (if they meet the eligibility criteria). Do not engage in a difficult conversation with the client. If necessary, refer the client to their health care provider for a more comprehensive assessment and conversation about which bivalent product is right for them.