OMA Ontario Medical Association

COVID-19 Vaccine Reference Tool

This content is reflective of Ontario's guidance on COVID-19 vaccination

About this resource

This resource was created to provide physicians with a reference for COVID-19 vaccines to help determine the appropriate vaccine dose and interval for patients based on age and immune status.

Information provided in the reference tables are inclusive of:

- **First Nations, Inuit and Métis populations**
- **Residents of high-risk congregate settings**, including residents of long-term care homes, retirement homes, Elder Care Lodges, and other congregate settings providing assisted-living and health services
- **Pregnant and breastfeeding individuals**
- **Healthcare workers**

There is currently no supply of Moderna BA.1 bivalent, most Moderna and Pfizer monovalent for ages 12 years +, Janssen, AstraZeneca or Medicago vaccines in Ontario, so they have been omitted from the reference tables.

How to use this resource

All reference tables are separated based on the categories below. Please read the important notes section ahead of using the tables, as this information is applicable to all populations.

What's new?

- Bivalent vaccines recommended for primary series in individuals 6 months and older
- Janssen vaccine no longer available in Ontario
- Recommendation to consider delaying boosters until Fall 2023
- Expanded indication of bivalent Moderna BA.4/5 vaccine as a booster for ages 6-17 years

COVID-19 Vaccine Reference Tool

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General population under 18 years

Primary Series

Eligible groups	Vaccine Product	Number of doses	Dosage	Interval
Ages 6 months – 4 years	★ Moderna BA.4/5 bivalent	2	**Royal Blue Cap/Grey Label:** 0.25mL (12.5mcg original mRNA + 12.5mcg BA.4/5 mRNA)	Reco: 2 months/56 days | Min. 28 days
	Pfizer monovalent	3	**Maroon Cap/Label:** 0.2mL (3mcg mRNA)	**Between Dose 1 and 2:** Reco: 2 months/ 56 days | Min. 21 days **Between Dose 2 and 3:** Reco: 2 months/ 56 days | Min. 2 months/56 days
	Moderna monovalent	2	**Royal Blue Cap/Purple Label:** 0.25mL (25mcg mRNA)	Reco: 2 months/56 days | Min. 28 days
Age 5 years	★ Pfizer BA.4/5 bivalent	2	**Orange Cap/Label:** 0.2mL (5mcg original mRNA + 5mcg BA.4/5 mRNA)	Reco: 2 months/56 days | Min. 28 days
	★ Moderna BA.4/5 bivalent		**Royal Blue Cap/Grey Label:** 0.25mL (12.5mcg original mRNA + 12.5mcg BA.4/5 mRNA)	
	Pfizer monovalent		**Orange Cap/Label:** 0.2mL (10mcg mRNA)	
	Moderna monovalent		**Royal Blue Cap/Purple Label:** 0.25mL (25mcg mRNA)	
Ages 6 – 11 years	★ Pfizer BA.4/5 bivalent	2	**Orange Cap/Label:** 0.2mL (5mcg original mRNA + 5mcg BA.4/5 mRNA)	Reco: 2 months/56 days | Min. 28 days
	★ Moderna BA.4/5 bivalent		**Royal Blue Cap/Grey Label:** 0.25mL (12.5mcg original mRNA + 12.5mcg BA.4/5 mRNA)	
	Pfizer monovalent		**Orange Cap/Label:** 0.2mL (10mcg mRNA)	
	Moderna monovalent		**Red Cap/Light Blue Label:** 0.25mL (50mcg mRNA) **Royal Blue Cap/Purple Label:** 0.5mL (50mcg mRNA)	

Reco = recommended interval **Min** = minimum interval ★ = preferential recommendation

Table and notes for general population under 18 years continue on page 3.

General population under 18 years (continued)

Primary Series

Eligible groups	Vaccine Product	Number of doses	Dosage	Interval
Ages 12 – 17 years	★1 Pfizer BA.4/5 bivalent	2	**Grey Cap/Label:** 0.3mL (15mcg original mRNA + 15mcg BA.4/5 mRNA)	Reco: 2 months/56 days | Min. 28 days
	★2 Moderna BA.4/5 bivalent		**Royal Blue Cap/Grey Label:** 0.5mL (25mcg original mRNA + 25mcg BA.4/5 mRNA)	
	Novavax *Only if cannot or will not receive mRNA vaccine*		0.5mL (5mcg recombinant protein)	

- While bivalent vaccines are only approved by Health Canada for use as boosters in individuals 5 years and older, **Ontario has adopted** NACI's recommendation to use bivalent products off-label for starting or completing a primary series for individuals 6 months and older.
- **Pfizer and Moderna vaccine products (both bivalent and monovalent) are authorized for different pediatric age groups.** Pfizer is authorized for 6 months to 4 years, and 5 to 11 years, while Moderna is authorized for 6 months to 5 years, and 6 to 11 years.

Preferential recommendations:

- **Bivalent Moderna is the preferred and only bivalent vaccine available in Canada for children ages 6 months - 4 years**
- **Bivalent Pfizer and Moderna vaccines are viewed as equal for individuals ages 5-11 years**
- **Bivalent Pfizer is preferred over bivalent Moderna for the primary series in individuals 12-17 years.** This recommendation stems from an observed increase in reports of myocarditis/pericarditis with the monovalent Moderna vaccine compared to the monovalent Pfizer vaccine when given as the primary series among adolescents and young adults.

Reco = recommended interval **Min** = minimum interval ★ = preferential recommendation
★# = tiered preferential recommendation (#1, #2, #3)

General population under 18 years

Booster Doses

Eligible groups	Vaccine Product	Dosage	Interval after previous dose or confirmed COVID-19 infection
Ages 6 months – 4 years	This group is not eligible for booster doses.		
Age 5	★ Pfizer BA.4/5 bivalent	**Orange Cap/Label:** 0.2mL (5mcg original mRNA + 5mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days*
	Pfizer monovalent	**Orange Cap/Label:** 0.2mL (10mcg mRNA)	
	Moderna monovalent	Moderna is not authorized for use as a booster dose in this age group.	
Ages 6 – 11 years	★ Pfizer BA.4/5 bivalent	**Orange Cap/Label:** 0.2mL (5mcg original mRNA + 5mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days*
	★ Moderna BA.4/5 bivalent	**Royal Blue Cap/Grey Label:** 0.25mL (12.5mcg original mRNA + 12.5mcg BA.4/5 mRNA)	
	Pfizer monovalent	**Orange Cap/Label:** 0.2mL (10mcg mRNA)	
	Moderna monovalent	Moderna is not authorized for use as a booster dose in this age group.	
Ages 12 – 17 years	★ Pfizer BA.4/5 bivalent	**Grey Cap/Label:** 0.3mL (15mcg original mRNA + 15mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days* | Min. 3 months/84 days
	★ Moderna BA.4/5 bivalent	**Royal Blue Cap/Grey Label:** 0.5mL (25mcg original mRNA + 25mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days* | Min. 4 months/112 days
	Moderna monovalent	**Royal Blue Cap/Purple Label:** 0.5mL (50mcg mRNA)	Reco: ≥6 months/168 days*

*Use your discretion to decide whether to administer a booster dose at a shorter interval than recommended. Note that intervals closer to 6 months are better, with longer intervals leading to a higher antibody response. For the minimum interval where not stated, refer to the product monograph of the vaccine product being administered.

Preferential recommendations:

- **Bivalent mRNA vaccines are the preferred booster option for individuals ages 5+.** A monovalent (original) mRNA booster may be offered to those who are not able or willing to receive a bivalent booster, if available.
- **Pfizer bivalent vaccine is the only authorized bivalent booster for children 5 years of age.**

Fall 2023 boosters:

Individuals 5 years and older should consider delaying receiving a COVID-19 vaccine booster until Fall 2023, when peak virus circulation is expected. Use clinical discretion to determine if individuals need a booster prior to Fall based on their unique health status and personal situation.

Caution: **Both monovalent and bivalent Pfizer vials have the same cap colour, label colour, and vial concentration.** Double check that you are using the intended vaccine product before administering.

Reco = recommended interval **Min** = minimum interval
★ = preferential recommendation ★# = tiered preferential recommendation (#1, #2, #3)

COVID-19 Vaccine Reference Tool

This content is reflective of Ontario's guidance on COVID-19 vaccination

General population 18 years +

Primary Series

Eligible groups	Vaccine Product	Number of doses	Dosage	Interval
Ages 18 – 29 years	★1 Pfizer BA.4/5 bivalent	2	**Grey Cap/Label:** 0.3mL (15mcg original mRNA + 15mcg BA.4/5 mRNA)	Reco: 2 months/56 days | Min. 28 days
	★2 Moderna BA.4/5 bivalent		**Royal Blue Cap/Grey Label:** 0.5mL (25mcg original mRNA + 25mcg BA.4/5 mRNA)	
	Novavax *Only if cannot or will not receive mRNA vaccine*		0.5mL (5mcg recombinant protein)	
Ages 30 years +	★ Pfizer BA.4/5 bivalent	2	**Grey Cap/Label:** 0.3mL (15mcg original mRNA + 15mcg BA.4/5 mRNA)	Reco: 2 months/56 days | Min. 28 days
	★ Moderna BA.4/5 bivalent		**Royal Blue Cap/Grey Label:** 0.5mL (25mcg original mRNA + 25mcg BA.4/5 mRNA)	
	Novavax *Only if cannot or will not receive mRNA vaccine*		0.5mL (5mcg recombinant protein)	

- While bivalent vaccines are only approved by Health Canada for use as boosters in individuals 5 years and older, **Ontario has adopted** NACI's recommendation to use bivalent products off-label for starting or completing a primary series for individuals 6 months and older**.**

Preferential recommendations:

- **Bivalent Pfizer is preferred over bivalent Moderna for the primary series in individuals 18-29 years.** This recommendation stems from an observed increase in reports of myocarditis/pericarditis with the monovalent Moderna vaccine compared to the monovalent Pfizer vaccine when given as the primary series among adolescents and young adults.
- **There is no preferred bivalent mRNA vaccine product for starting or completing a primary series among individuals ages 30+.**

Reco = recommended interval **Min** = minimum interval ★ = preferential recommendation
★# = tiered preferential recommendation (#1, #2, #3)

COVID-19 Vaccine Reference Tool

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General population 18 years +

Booster Doses

Eligible groups	Vaccine Product	Dosage	Interval after previous dose or confirmed COVID-19 infection
Ages 18 years +	★1 Pfizer BA.4/5 bivalent	**Grey Cap/Label:** 0.3mL (15mcg original mRNA + 15mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days* | Min. 3 months/84 days
	★1 Moderna BA.4/5 bivalent	**Royal Blue Cap/Grey Label:** 0.5mL (25mcg original mRNA + 25mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days* | Min. 4 months/112 days
	★2 Moderna monovalent	**Royal Blue Cap/Purple Label:** 0.5mL (50mcg mRNA)	Reco: ≥6 months/168 days*
	Novavax *Only if cannot or will not receive mRNA vaccine*	0.5mL (5mcg recombinant protein)	

*Use your discretion to decide whether to administer a booster dose at a shorter interval than recommended. Note that intervals closer to 6 months are better, with longer intervals leading to a higher antibody response. For the minimum interval where not stated, refer to the product monograph of the vaccine product being administered.

Preferential recommendations:

- **Bivalent Pfizer and Moderna boosters are viewed as equal for adults 18+.**
- **Bivalent mRNA vaccines are the preferred option for adults.** A monovalent (original) mRNA booster may be offered to adults who are not able or willing to receive a bivalent booster, if available.

Fall 2023 boosters:

Individuals 5 years and older should consider delaying receiving a COVID-19 vaccine booster until Fall 2023, when peak virus circulation is expected. Use clinical discretion to determine if individuals need a booster prior to Fall based on their unique health status and personal situation.

Caution: **Both monovalent and bivalent Pfizer vials have the same cap colour, label colour, and vial concentration.** Double check that you are using the intended vaccine product before administering.

Reco = recommended interval **Min** = minimum interval ★ = preferential recommendation
★# = tiered preferential recommendation (#1, #2, #3)

Moderately to severely immunocompromised individuals

Individuals who are moderately to severely immunocompromised include:

- Those receiving dialysis (hemodialysis or peritoneal dialysis)
- Those receiving active treatment or completed treatment within 3 months for solid tumour or hematologic malignancies
- Recipients of solid-organ transplant and taking immunosuppressive therapy
- Recipients of chimeric antigen receptor (CAR)-T-cell therapy or hematopoietic stem cell transplant (within 2 years of transplantation or taking immunosuppression therapy)
- Individuals with moderate to severe primary immunodeficiency
- Individuals with HIV with AIDS-defining illness in the last 12 months before starting vaccine series, or severe immune compromise with CD4 count < 200 cells/uL or CD4 percentage < 15%, or without HIV viral suppression
- Individuals receiving active treatment with anti-B cell therapies (or completed treatment within 12 months), high-dose systemic corticosteroids, alkylating agents, antimetabolites, tumour-necrosis factor (TNF) inhibitors and other biologics that significantly suppress the immune system

Refer to MOH: COVID-19 Vaccine Guidance for more detailed eligibility.

Note that individuals who received a hematopoietic stem cell transplant (HSCT), hematopoietic cell transplant (HCT) (autologous or allogeneic), or CAR-T-cell therapy are recommended to be re-vaccinated with a new COVID-19 vaccine primary series given the loss of immunity. Timing of re-vaccination should be based on clinical discretion and determined on a case-by-case basis.

Moderately to severely immunocompromised individuals under 12 years

Primary Series

Eligible groups	Vaccine Product	Number of doses	Dosage	Interval between Dose 1 and 2	Interval between Dose 2 and 3	Interval between Dose 3 and 4
Ages 6 months – 4 years	★[1] Moderna BA.4/5 bivalent	3	**Royal Blue Cap/Grey Label:** 0.25mL (12.5mcg original mRNA + 12.5mcg BA.4/5 mRNA)	Reco: 2 months/ 56 days | Min. 28 days		N/A
	Pfizer monovalent	4	**Maroon Cap/Label:** 0.2mL (3mcg mRNA)	Reco: 2 months/ 56 days | Min. 21 days	Reco: 2 months/56 days | Min. 2 months/56 days	
	★[2] Moderna monovalent	3	**Royal Blue Cap/Purple Label:** 0.25mL (25mcg mRNA)	Reco: 2 months/ 56 days | Min. 28 days		N/A
Age 5 years	★ Pfizer BA.4/5 bivalent	3	**Orange Cap/Label:** 0.2mL (5mcg original mRNA + 5mcg BA.4/5 mRNA)	Reco: 2 months/56 days | Min. 28 days		N/A
	★ Moderna BA.4/5 bivalent		**Royal Blue Cap/Grey Label:** 0.25mL (12.5mcg original mRNA + 12.5mcg BA.4/5 mRNA)			
	Pfizer monovalent		**Orange Cap/Label:** 0.2mL (10mcg mRNA)			
	Moderna monovalent		**Royal Blue Cap/Purple Label:** 0.25mL (25mcg mRNA)			

Reco = recommended interval **Min** = minimum interval ★ = preferential recommendation

Table and notes for immunocompromised individuals under 12 years continue on page 8.

Moderately to severely immunocompromised individuals under 12 years (continued)

Primary Series

Eligible groups	Vaccine Product	Number of doses	Dosage	Interval between Dose 1 and 2	Interval between Dose 2 and 3	Interval between Dose 3 and 4
Ages 6 – 11 years	★ Pfizer BA.4/5 bivalent	3	**Orange Cap/Label:** 0.2mL (5mcg original mRNA + 5mcg BA.4/5 mRNA)	Reco: 2 months/56 days | Min. 28 days		N/A
	★ Moderna BA.4/5 bivalent		**Royal Blue Cap/Grey Label:** 0.25mL (12.5mcg original mRNA + 12.5mcg BA.4/5 mRNA)			
	Pfizer monovalent		**Orange Cap/Label:** 0.2mL (10mcg mRNA)			
	Moderna monovalent		**Red Cap/Light Blue Label:** 0.25mL (50mcg mRNA) **Royal Blue Cap/Purple Label:** 0.5mL (50mcg mRNA)			

- While bivalent vaccines are only approved by Health Canada for use as boosters in individuals 5 years and older, **Ontario has adopted** NACI's recommendation to use bivalent products off-label for starting or completing a primary series for individuals 6 months and older**.**

Preferential recommendations:

- **Bivalent Moderna is the preferred and only bivalent vaccine available in Canada for children ages 6 months - 4 years.** When immunocompromised children in this age group cannot or will not receive the bivalent Moderna vaccine, monovalent Moderna 25mcg vaccine is preferred over the monovalent Pfizer vaccine based on feasibility challenges with completing the monovalent Pfizer series, such as scheduling 4 separate appointments and spacing appointments appropriately relative to other childhood vaccination appointments.
- **Bivalent Pfizer and Moderna vaccines are viewed as equal for individuals ages 5-11 years**
- **Immunocompromised individuals 6 months and older may benefit more from a primary series with bivalent Moderna compared to bivalent Pfizer, since bivalent Moderna may result in a greater immune response due to its higher dose.**

Reco = recommended interval **Min** = minimum interval ★ = preferential recommendation

Moderately to severely immunocompromised individuals under 12 years

Booster Doses

Eligible groups	Vaccine Product	Dosage	Interval after previous dose or confirmed COVID-19 infection
Ages 6 months – 4 years	This group is not eligible for booster doses.		
Age 5	★ Pfizer BA.4/5 bivalent	**Orange Cap/Label:** 0.2mL (5mcg original mRNA + 5mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days*
	Pfizer monovalent	**Orange Cap/Label:** 0.2mL (10mcg mRNA)	
	Moderna monovalent	Moderna is not authorized for use as a booster dose in this age group.	
Ages 6 – 11 years	★ Pfizer BA.4/5 bivalent	**Orange Cap/Label:** 0.2mL (5mcg original mRNA + 5mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days*
	★ Moderna BA.4/5 bivalent	**Royal Blue Cap/Grey Label:** 0.25mL (12.5mcg original mRNA + 12.5mcg BA.4/5 mRNA)	
	Pfizer monovalent	**Orange Cap/Label:** 0.2mL (10mcg mRNA)	
	Moderna monovalent	Moderna is not authorized for use as a booster dose in this age group.	

*Use your discretion to decide whether to administer a booster dose at a shorter interval than recommended. Note that intervals closer to 6 months are better, with longer intervals leading to a higher antibody response. For the minimum interval where not stated, refer to the product monograph of the vaccine product being administered.

Preferential recommendations:

- **Bivalent mRNA vaccines are the preferred booster option for individuals ages 5+.** A monovalent (original) mRNA booster may be offered to those who are not able or willing to receive a bivalent booster.
- **Pfizer bivalent vaccine is the only authorized bivalent booster for children 5 years of age.**

Fall 2023 boosters:

- Individuals 5 years and older should consider delaying receiving a COVID-19 vaccine booster until Fall 2023, when peak virus circulation is expected. Use clinical discretion to determine if individuals need a booster prior to Fall based on their unique health status and personal situation.

Reco = recommended interval **Min** = minimum interval ★ = preferential recommendation
★# = tiered preferential recommendation (#1, #2, #3)

Moderately to severely immunocompromised individuals 12 years +

Primary Series

Eligible groups	Vaccine Products	Number of doses	Dosage	Interval between Dose 1 and 2	Interval between Dose 2 and 3
Ages 12 – 29 years	★1 Pfizer BA.4/5 bivalent	3	**Grey Cap/Label:** 0.3mL (15mcg original mRNA + 15mcg BA.4/5 mRNA)	Reco: 2 months/56 days | Min. 28 days	
	★2 Moderna BA.4/5 bivalent		**Royal Blue Cap/Grey Label:** 0.5mL (25mcg original mRNA + 25mcg BA.4/5 mRNA)		
	Novavax *Only if cannot or will not receive mRNA vaccine*		0.5mL (5mcg recombinant protein)		
Ages 30 years+	★ Pfizer BA.4/5 bivalent	3	**Grey Cap/Label:** 0.3mL (15mcg original mRNA + 15mcg BA.4/5 mRNA)	Reco: 2 months/56 days | Min. 28 days	
	★ Moderna BA.4/5 bivalent		**Royal Blue Cap/Grey Label:** 0.5mL (25mcg original mRNA + 25mcg BA.4/5 mRNA)		
	Novavax *Only if cannot or will not receive mRNA vaccine*		0.5mL (5mcg recombinant protein)		

- While bivalent vaccines are only approved by Health Canada for use as boosters in individuals 5 years and older, **Ontario has adopted** NACI's recommendation to use bivalent products off-label for starting or completing a primary series for individuals 6 months and older.

Preferential recommendations:

- **Bivalent Pfizer is preferred over bivalent Moderna for the primary series in individuals 12-29 years.** This recommendation stems from an observed increase in reports of myocarditis/pericarditis with the monovalent Moderna vaccine compared to the monovalent Pfizer vaccine when given as the primary series among adolescents and young adults. However, for some moderately to severely immunocompromised individuals, administration of the bivalent Moderna vaccine may be considered based on clinician judgement and informed consent, since it is a higher dose and may result in a greater immune response.
- **There is no preferred bivalent mRNA vaccine product for individuals ages 30+.**

Reco = recommended interval **Min** = minimum interval ★ = preferential recommendation
★# = tiered preferential recommendation (#1, #2, #3)

Moderately to severely immunocompromised individuals 12 years +

Booster Doses

Eligible groups	Vaccine Product	Dosage	Interval after previous dose or confirmed COVID-19 infection
Ages 12 – 17 years	★ Pfizer BA.4/5 bivalent	**Grey Cap/Label:** 0.3mL (15mcg original mRNA + 15mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days* | Min. 3 months/84 days
	★ Moderna BA.4/5 bivalent	**Royal Blue Cap/Grey Label:** 0.5mL (25mcg original mRNA + 25mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days* | Min. 4 months/112 days
	Moderna monovalent	**Royal Blue Cap/Purple Label:** 0.5mL (50mcg mRNA)	Reco: ≥6 months/168 days*
Ages 18 years+	★1 Pfizer BA.4/5 bivalent	**Grey Cap/Label:** 0.3mL (15mcg original mRNA + 15mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days* | Min. 3 months/84 days
	★1 Moderna BA.4/5 bivalent	**Royal Blue Cap/Grey Label:** 0.5mL (25mcg original mRNA + 25mcg BA.4/5 mRNA)	Reco: ≥6 months/168 days* | Min. 4 months/112 days
	★2 Moderna monovalent	**Royal Blue Cap/Purple Label:** 0.5mL (50mcg mRNA)	Reco: ≥6 months/168 days*
	Novavax *Only if cannot or will not receive mRNA vaccine*	0.5mL (5mcg recombinant protein)	

*Use your discretion to decide whether to administer a booster dose at a shorter interval than recommended. Note that intervals closer to 6 months are better, with longer intervals leading to a higher antibody response. For the minimum interval where not stated, refer to the product monograph of the vaccine product being administered.

Preferential recommendations:

- **Bivalent mRNA vaccines are the preferred booster option for individuals 12+.** A monovalent (original) mRNA booster may be offered to those who are not able or willing to receive a bivalent booster, if available..
- **Bivalent Pfizer and Moderna boosters are viewed as equal for 12+.**

Fall 2023 boosters:
Individuals 5 years and older should consider delaying receiving a COVID-19 vaccine booster until Fall 2023, when peak virus circulation is expected. Use clinical discretion to determine if individuals need a booster prior to Fall based on their unique health status and personal situation.

Caution: **Both monovalent and bivalent Pfizer vials have the same cap colour, label colour, and vial concentration.** Double check that you are using the intended vaccine product before administering.

Reco = recommended interval **Min** = minimum interval ★ = preferential recommendation
★# = tiered preferential recommendation (#1, #2, #3)

Vaccination following COVID-19

When infected *before* the first dose or *before* completing primary series

Eligible groups	Vaccine Product	Dosage	Interval
Immunocompetent AND no history of MIS-C/A	Follow vaccine product recommendations for primary series based on dose number, age and immune status	Follow primary series dose recommendations based on dose number, age and immune status	Reco: 2 months (56 days) after symptom onset or positive test result if asymptomatic
Moderately to severely immunocompromised AND no history of MIS-C/A			Reco: 1 to 2 months (28 to 56 days) after symptom onset or positive test result if asymptomatic
History of MIS-C/A			Reco: When clinically recovered or ≥90 days from diagnosis of MIS-C/A, whichever is longer

When infected *after* primary series is completed

Eligible groups	Vaccine Product	Dosage	Interval
Currently eligible for booster dose(s), ages 5 years+	Follow vaccine product recommendations for boosters based on dose number, age and immune status	Follow booster dose recommendations based on age and immune status	Reco: 6 months (168 days) after confirmed COVID-19 infection by positive test or symptom onset after contact with positive individual

Reco = recommended interval **Min** = minimum interval

Vaccination following myocarditis/pericarditis

Eligible groups	Vaccine Product	Dosage	Interval
Within 6 weeks of mRNA vaccination: • **Diagnosed with myocarditis +/- pericarditis, OR** • **Abnormal cardiac investigation (e.g. ECG, elevated troponins, echocardiogram, or cardiac MRI)**	Follow vaccine product recommendations based on dose number, age and immune status	If requested by patient, follow dose recommendations based on dose number, age and immune status	Reco: Defer further doses as a precautionary measure until more is known; if patient decides to get vaccinated after risk/benefit discussion, vaccinate when symptom free or ≥90 days since vaccination and use bivalent Pfizer 30mcg vaccine if part of primary series
Uncertainty around myocarditis diagnosis following mRNA vaccination		Follow dose recommendations based on dose number, age and immune status	Reco: Discuss vaccination options with the same or different vaccine on case-by-case basis with your patient
History of pericarditis following mRNA vaccination with: • **no cardiac workup, OR** • **normal cardiac investigations**			Reco: When symptom free or ≥ 90 days since vaccination
History of myocarditis unrelated to mRNA vaccination			Reco: Discuss vaccination options on case-by-case basis with your patient; patient should receive vaccination if no longer clinically followed for cardiac issues

Reco = recommended interval **Min** = minimum interval

Important notes:

Preferential recommendations

Primary Series

- **Bivalent mRNA COVID-19 vaccines should be used to start or complete primary series.** While bivalent vaccines are only approved by Health Canada for use as boosters in individuals 5 years and older, Ontario has adopted NACI's recommendation to use bivalent products off-label for starting or completing a primary series for individuals 6 months and older.
- **Bivalent Moderna is the preferred and only bivalent vaccine available in Canada for children ages 6 months - 4 years.**
- **Monovalent Pfizer is preferred in immunocompromised children ages 6 months to 4 years when bivalent vaccines are unavailable:** When immunocompromised children in this age group cannot or will not receive bivalent vaccines, monovalent Moderna is preferred over monovalent Pfizer based on feasibility challenges with completing the monovalent Pfizer series, such as scheduling 4 separate appointments and spacing appointments appropriately relative to other childhood vaccination appointments.
- **Bivalent Pfizer and Moderna vaccines are viewed as equal for primary series in individuals ages 5-11 years and ≥30 years.**
- **Bivalent Pfizer is preferred over bivalent Moderna for the primary series in individuals 12-29 years:** The bivalent Pfizer vaccine is preferentially recommended over the bivalent Moderna vaccine for the primary series in individuals aged 12-29 years. This recommendation stems from an observed increase in reports of myocarditis/pericarditis with the monovalent Moderna vaccine compared to the monovalent Pfizer vaccine when given as the primary series among adolescents and young adults. However, for some moderately to severely immunocompromised individuals, administration of the bivalent Moderna vaccine may be considered based on clinician judgement and informed consent, since it is a higher dose and may result in a greater immune response.
- **Offer Novavax to individuals 12+ who cannot or will not accept an mRNA vaccine:** Novavax may be offered to individuals 12+ without contraindications who are not able or willing to receive an mRNA COVID-19 vaccine.

Boosters

- **Bivalent mRNA vaccines are the preferred option for booster doses in individuals ages 5 years +.**
- **Pfizer BA.4/5 bivalent and Moderna BA.4/5 bivalent boosters are viewed as equal for individuals ages 6 years +:** There is no preferential recommendation between the Pfizer and Moderna bivalent vaccines as booster doses for individuals ages 6 years +.
- **Pfizer BA.4/5 bivalent vaccine is the only authorized bivalent booster for children 5 years of age.**
- **Offer monovalent (original) mRNA boosters to individuals 5+ who cannot or will not accept a bivalent booster:** Individuals 5 years of age and older who are not able or willing to receive a bivalent mRNA vaccine may be offered an original mRNA COVID-19 vaccine for their booster dose(s), if available.
- **Offer Novavax boosters to adults 18+ who cannot or will not accept an mRNA booster:** Novavax may be offered to adults without contraindications who are not able or willing to receive an mRNA COVID-19 vaccine (with informed consent).

Refer to Ministry of Health: COVID-19 vaccine guidance for further preferential recommendations and guidance on administering COVID-19 vaccines to your patients.

Important notes:

Up to date with COVID-19 vaccinations

Patients are considered up-to-date with COVID-19 vaccinations when:

- **Children aged 6 months – 4 years** have completed a primary series
- **Individuals aged 5+** have completed a primary series and received the currently recommended booster dose

Individuals vaccinated outside of Canada

- **Primary series:** Individuals are considered to have completed their primary series when they have received a COVID-19 vaccine approved by Health Canada and/or on the World Health Organization's (WHO) COVID-19 Vaccine Emergency Use Listing (EUL), following their corresponding schedule.

  Individuals aged 5 years + who received vaccines not approved by Health Canada nor on the WHO EUL may be required to receive additional doses to complete their primary series:

  - **Immunocompetent individuals who received 1 or 2 out-of-province vaccines:**
    Should receive 1 Health-Canada approved dose
  - **Immunocompromised individuals who received 1 out-of-province vaccine:**
    Should receive 2 Health-Canada approved doses
  - **Immunocompromised individuals who received 2 out-of-province vaccines:**
    Should receive 1 Health-Canada approved dose
  - **Immunocompetent or immunocompromised individuals who received 3 out-of-province vaccines:**
    Should not receive any further Health Canada-approved doses

  Additional doses should be given 56 days or a minimum of 28 days after their last dose.

- **Booster dose(s):** Individuals aged 5+ who have completed their primary series are eligible for a bivalent booster dose if it has been at least 6 months since their previous dose or confirmed COVID-19 infection.

Fall 2023 booster

Individuals 5 years and older should consider delaying their COVID-19 vaccine booster until Fall 2023. This will maximize protection when peak circulation of the virus is expected. Use clinical discretion to determine if individuals need a booster prior to Fall based on their unique health status and personal situation.

Pregnant individuals should be offered a Fall booster dose at any stage of pregnancy if at least 6 months have passed since their last dose or confirmed COVID-19 infection.

Refer to Ministry of Health: COVID-19 vaccine guidance for further guidance on ensuring patients are up-to-date with vaccinations, including individuals vaccinated outside of Canada, and on Fall boosters.

Mixed vaccine schedules

- **Primary series:** If a primary series is started with a monovalent (original) mRNA vaccine, a bivalent vaccine can be used to complete the series. If the primary series was started with a bivalent vaccine that is no longer available, another bivalent mRNA vaccine may be used to complete the series. Previous doses should be counted and series should be continued, not restarted.
- **Booster dose(s):** Informed consent should include a discussion about the benefits and potential risks of mixed booster schedules given the limited data on effectiveness and safety.

Co-administration of COVID-19 vaccines with influenza and other vaccines

Individuals 6 months and older: COVID-19 vaccines may be given at the same time as, or at any time before or after other non-COVID-19 vaccines, including the influenza vaccine. Informed consent should include a discussion of the benefits and risks given the limited evidence on co-administration. If vaccines must be co-administered, use separate limbs where possible. If the same limb is used, separate injection sites by 2.5cm/ 1 inch.

As a precaution, it is recommended to wait at least four weeks before or after administering Imvamune® (mpox vaccine) to administer the COVID-19 vaccine, where possible.

COVID-19 vaccine allergies

Refer to OMA: Pathways to COVID-19 vaccination tool for more information on vaccinating patients with suspected or confirmed COVID-19 vaccine allergies, and other allergic reactions and issues.

Refer to Ministry of Health: COVID-19 vaccine guidance for further guidance on mixed vaccine schedules and co-administration.