# Overview of key features of COVID-19 vaccines authorized in Canada

| **Product brand name and formulation** | **Pfizer-BioNTech Comirnaty** | **Pfizer-BioNTech Comirnaty** | **Pfizer-BioNTech Comirnaty** | **Moderna Spikevax** | **Novavax NUVAXOVID** |
| --- | --- | --- | --- | --- | --- |
| **Maroon cap and label**  **(Omicron XBB.1.5 subvariant)**  **6 months to <5 years** | **Blue cap and label**  **(Omicron XBB.1.5 subvariant)**  **5 to <12 years** | **Grey cap and label**  **(Omicron XBB.1.5 subvariant)**  **12 years of age and older** | **Royal blue cap** | **Royal blue cap** |
| **Coral blue label border**  **(Omicron XBB.1.5 subvariant)**  **6 months of age and older** | **Orange label border**  **(Omicron XBB.1.5 subvariant)**  **10 mcg/mL** |
| **DIN/SNOMED** | 02541866/51511000087105 | 02541858/51501000087108 | 02541823/51471000087104 | 02541270/51481000087102 | 02543656 /51491000087100 |
| **Type of vaccine** | mRNA | mRNA | mRNA | mRNA | Protein subunit |
| **Antigen component** | One dose (0.2 mL) contains 3 mcg of mRNA encoding Omicron XBB.1.5 subvariant spike protein (embedded in lipid nanoparticles). | One dose (0.3 mL) contains 10 mcg of mRNA encoding Omicron XBB.1.5 subvariant spike protein (embedded in lipid nanoparticles). | One dose (0.3 mL) contains 30 mcg of mRNA encoding Omicron XBB.1.5 subvariant spike protein (embedded in lipid nanoparticles). | 0.1 mg/mL of mRNA encoding Omicron XBB.1.5 subvariant spike protein (contained in lipid nanoparticles). | One dose (0.5 mL) contains 5 mcg of SARS-CoV-2 recombinant Omicron XBB.1.5 subvariant spike protein. |
| **Date of authorization in Canada** | September 28, 2023 (for 6 months to <5 years of age). | September 28, 2023 (for 5 to <12 years of age). | September 28, 2023 (for 12 years of age and older). | September 12, 2023 (for 6 months of age and older). | December 5, 2023 (for 12 years of age and older). |
| **Authorized ages for use**[a](#BookmarkA) | 6 months to <5 years of age. | 5 to <12 years of age. | 12 years of age and older. | 6 months of age and older. | 12 years of age and older. |
| **Authorized dose** | **0.2 mL**  (3 mcg of mRNA encoding Omicron XBB.1.5 subvariant spike protein). | **0.3 mL**  (10 mcg of mRNA encoding Omicron XBB.1.5 subvariant spike protein). | **0.3 mL**  (30 mcg of mRNA encoding Omicron XBB.1.5 subvariant spike protein). | **0.5 mL**  (50 mcg dose of mRNA encoding Omicron XBB.1.5 subvariant spike protein) for ages 12 years and older.  **0.25 mL**  (25 mcg dose of mRNA encoding Omicron XBB.1.5 subvariant spike protein) for ages 6 months to <12 years. | **0.5 mL**  (5 mcg of Omicron XBB.1.5 subvariant spike protein). |
| **Authorized schedule**[a](#BookmarkA) | 3 doses for 6 months to <5 years of age who are not previously vaccinated with an interval of 3 weeks between the first and second dose and at least 8 weeks after the second dose.  1 dose for 6 months to <5 years of age who have completed a primary series with an interval of at least 6 months from the most recent previous COVID-19 vaccine dose. | 1 dose for 5 to <12 years of age for those not previously vaccinated.  1 dose for 5 to <12 years of age who were previously vaccinated with an interval of at least 6 months from the most recent previous COVID-19 vaccine dose. | 1 dose for 12 years of age and older for those not previously vaccinated.  1 dose for 12 years of age and older who were previously vaccinated with an interval of at least 3 to 6 months from the most recent previous COVID-19 vaccine dose. | 2 doses (25 mcg), 4 weeks apart, for 6 months to <5 years of age for those not previously vaccinated.  1 dose (25 mcg) for 6 months to <5 years of age who have been previously vaccinated with 1 or more previous doses.  1 dose (25 mcg) for 5 to <12 years of age for those previously or not previously vaccinated.  1 dose (50 mcg) for 12 years of age and older who have been previously or not previously vaccinated with an interval of at least 6 months from the most recent previous COVID-19 vaccine dose. | 2 doses, 3 weeks apart for 12 years of age and older for those not previously vaccinated.  1 dose for 12 years of age and older who were previously vaccinated with an interval of at least 6 months from the most recent previous COVID-19 vaccine dose. |
| **Nature of the antigen** | Trans-membrane prefusion spike protein of Omicron subvariant XBB.1.5 | Trans-membrane prefusion spike protein of Omicron subvariant XBB.1.5 | Trans-membrane prefusion spike protein of Omicron subvariant XBB.1.5 | Trans-membrane prefusion spike protein of Omicron subvariant XBB.1.5 | Recombinant prefusion spike protein of the Omicron subvariant XBB.1.5 |
| **Potential allergens** | Polyethylene glycol (PEG)  Tromethamine (trometamol or Tris) | Polyethylene glycol (PEG)  Tromethamine (trometamol or Tris) | Polyethylene glycol (PEG)  Tromethamine (trometamol or Tris) | Polyethylene glycol (PEG)  Tromethamine (trometamol or Tris) | Polysorbate 80 |
| **Adjuvant (if present)** | None | None | None | None | Matrix-M; comes premixed with the product |
| **Storage**[b](#BookmarkB) | Ultra-frozen at -90°C to -60°C until expiry.  Do NOT store vials at -25°C to -15°C.  Refrigerator (2°C to 8°C) for 10 weeks.  Room temperature: no more than a total of 12 hours prior to dilution and no more than 12 hours after dilution[c](#BookmarkC).  Once punctured for dilution, use within 12 hours. Punctured vials can be stored at room temperature or refrigerated (2°C to 25°C).  Do not refreeze once thawed.  Do not use beyond expiry date. | Ultra-frozen at -90°C to -60°C until expiry.  Do NOT store vials at -25°C to -15°C.  Refrigerator (2°C to 8°C) for 10 weeks.  Room temperature: no more than a total of 12 hours before first puncture and no more than 12 hours after first puncture[c](#BookmarkC).  Once punctured, use within 12 hours. Punctured vials can be stored at room temperature or refrigerated (2°C to 25°C).  Do not refreeze once thawed.  Do not use beyond expiry date. | Ultra-frozen at -90°C to -60°C until expiry.  Do NOT store vials at -25°C to -15°C.  Refrigerator (2°C to 8°C) for 10 weeks.  Room temperature: no more than a total of 12 hours before first puncture and no more than 12 hours after first puncture[c](#BookmarkC).  Once punctured, use within 12 hours. Punctured vials can be stored at room temperature or refrigerated (2°C to 25°C).  Do not refreeze once thawed.  Do not use beyond expiry date. | Frozen at -50°C to -15°C until expiry[d](#BookmarkD).  Refrigerator (2°C to 8°C) for up to 30 days prior to first use.  Room temperature (8°C to 25°C) for a total of up to 24 hours (whether unpunctured or punctured).  Once punctured, use within 24 hours. Punctured vials can be stored at refrigerated or room temperature (2°C to 25°C).  Do not refreeze once thawed.  Do not use beyond expiry date. | Unopened vials can be refrigerated (2°C to 8°C) for up to 12 months.  Once punctured, vials can be stored at room temperature (8°C to 25°C) for a total of up to 6 hours or refrigerated (2°C to 8°C) for up to 12 hours.  Do not freeze.  Do not use beyond expiry date. |
| **Transport** | Before puncture:  If local redistribution is needed, full cartons containing unpunctured vials may be transported at -90°C to -60°C; full cartons or individual unpunctured vials may also be transported at 2°C to 8°C.  After puncture:  There is not enough data to support transportation of open vials and loaded syringes. | Before puncture:  If local redistribution is needed, full cartons containing unpunctured vials may be transported at -90°C to -60°C; full cartons or individual unpunctured vials may also be transported at 2°C to 8°C.  After puncture:  There is not enough data to support transportation of open vials and loaded syringes. | Before puncture:  If local redistribution is needed, full cartons containing unpunctured vials may be transported at -90°C to -60°C; full cartons or individual unpunctured vials may also be transported at 2°C to 8°C.  After puncture:  There is not enough data to support transportation of open vials and loaded syringes. | Before puncture:  Frozen transport preferred at -50°C to -15°C. Can be carefully transported in the liquid state for up to 12 hours at 2°C to 8°C. See [product monograph](https://covid-vaccine.canada.ca/info/pdf/spikevax-xbb-1-5-pm-en.pdf) for more details.  After puncture:  Open vials and syringes may be transported at 2°C to 25°C for up to 24 hours as long as total time at room temperature does not exceed 24 hours and total time post-puncture does not exceed 24 hours. | Before puncture:  2°C to 8°C and the temperature monitored during transport.  After puncture:  Open vials may be transported at 2°C to 8°C for up to 12 hours or at room temperature (up to 25°C) for up to 6 hours.  A loaded syringe should not be transported aside from routine foot traffic in a clinical or medical setting. |
| **Handling Instructions** | Multidose vials may be thawed in the refrigerator (2°C to 8°C) or at room temperature (up to 25°C).  Allow the vial to sit at room temperature (up to 25°C) for 30 minutes, then mix by inverting the vaccine gently 10 times. Do not shake.  For dilution instructions, see [product monograph](https://covid-vaccine.canada.ca/info/pdf/comirnaty-omicron-xbb-1-5-pm-en.pdf). | Multidose vials may be thawed in the refrigerator (2°C to 8°C) or at room temperature (up to 25°C).  Before use, invert the vaccine gently 10 times. Do not shake.  After inverting, the vaccine should appear as a white to off-white suspension with no visible particles. Do not use if liquid is discoloured or if particles are observed after inverting.  Mark the date and time that the product should be discarded on the label (12 hours after first puncture).  Do not dilute. | Multidose vials may be thawed in the refrigerator (2°C to 8°C) or at room temperature (up to 25°C).  Before use, invert the vaccine gently 10 times. Do not shake.  After inverting, the vaccine should appear as a white to off-white suspension with no visible particles. Do not use if liquid is discoloured or if particles are observed after inverting.  Mark the date and time that the product should be discarded on the label (12 hours after first puncture).  Do not dilute. | Multidose vials may be thawed at room temperature for 45 minutes (15°C to 25°C) OR for 2 hours under refrigeration (2°C to 8°C). After refrigeration thawing, let vial stand at room temperature for 15 minutes before administration.  The vaccine should be a white to off-white dispersion. It may contain white or translucent product-related particulates. The vaccine should not be administered if there is foreign particulate matter or discoloration.  Swirl the vial gently after thawing and between each withdrawal. Do not shake.  Mark the date and time that the product should be discarded on the label (24 hours after first puncture).  Do not dilute. | Gently swirl the multidose vial before and in between each dose withdrawal. Do not shake.  Prior to administration, visually inspect the contents of the vial for visible particulate matter or discolouration. Also, visually inspect the vial for cracks or any abnormalities, such as evidence of tampering. If any of these conditions exists, the vaccine should not be administered.  Mark the date and time that the product should be discarded on the label (12 hours after first puncture).  Do not dilute. |
| **Reconstitution** | Yes – 0.9% sodium chloride diluent provided by the manufacturer[c](#BookmarkC).  **2.2 mL** of diluent is added to the vial.  Store diluent at room temperature. | No. | No. | No. | No. |
| **Route of administration** | Intramuscular | Intramuscular | Intramuscular | Intramuscular | Intramuscular |
| **Syringe and needle selection**[e](#BookmarkE), [f](#BookmarkF) | Preferentially use a low dead-volume syringe or needle.  21-gauge or narrower needle for reconstitution.  22- to 25-gauge needle for administration. | Preferentially use a low dead-volume syringe or needle.  22- to 25-gauge needle for administration. | Preferentially use a low dead-volume syringe or needle.  22- to 25-gauge needle for administration. | Preferentially use a low dead-volume syringe or needle.  22- to 25-gauge needle for administration. | 22- to 25-gauge needle for administration. |
| **Formats available** | Multidose vial.  After dilution with 2.2 mL of diluent, contains 10 doses of 0.2 mL[c](#BookmarkC).  Preservative-free. | Multidose vial.  Contains 2.25 mL in a vial; 6 doses of 0.3 mL[c](#BookmarkC).  Preservative-free. | Multidose vial.  Contains 2.25 mL in a vial; 6 doses of 0.3 mL[c](#BookmarkC).  Preservative-free. | Multidose vial.  0.10 mg/mL; 2.5 mL in a vial; 5 doses of 0.5 mL; 10 doses of 0.25 mL.  Preservative-free. | Multidose vial.  5 mcg/0.5 mL; 2.5 mL in a vial; 5 doses of 0.5 mL.  Preservative-free. |
| **Expiry date** | The vaccine should not be used after the expiration date printed on the vials and cartons. | The vaccine should not be used after the expiration date printed on the vials and cartons. | The vaccine should not be used after the expiration date printed on the vials and cartons. | Expiry date printed on vial and carton labels, but it may be extended.  To find the expiration date, locate the lot number on the vial and enter it in the [online Moderna ‘Vial Expiration Checker’](https://modernacovid19global.com/vial-lookup). | Do not use this vaccine after the expiry date, which is stated on the label after EXP. The expiry date refers to the last day of that month. |

a Authorized per the product monograph. The National Advisory Committee on Immunization (NACI) recommendations may differ. Refer to the [NACI statements](https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci.html#covid) or the [COVID-19 vaccines chapter of the Canadian Immunization Guide](https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-26-covid-19-vaccine.html).

b Protected from light during storage.

c Refer to the [Pfizer-BioNTech Comirnaty Omicron XBB.1.5 product monograph](https://covid-vaccine.canada.ca/comirnaty-omicron-xbb15/product-details) for appropriate diluent, dilution instructions and type of needles/syringes that can be used to extract doses from the vial and for the storage and handling requirements.

d Do not store on dry ice.

e Refer to the [Canadian Immunization Guide for needle selection guidelines](https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-1-key-immunization-information/page-8-vaccine-administration-practices.html#t3).

f Source: [Vaccine administration practices: Canadian Immunization Guide](https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-1-key-immunization-information/page-8-vaccine-administration-practices.html).