COVID-19 (mRNA)
COVID-19 mRNA Vaccine mRNA-1273  Supplier: Moderna

INDICATIONS:
- Vaccination will occur in phases. Sequencing of populations for whom the vaccine is currently indicated in British Columbia is available on the BCCDC COVID-19 Vaccine Eligibility page.

The vaccine is not approved for use in those less than 18 years of age.  

DOSES AND SCHEDULE:
Adults 18 years of age and older: 2 doses given as 0.5 mL IM, 28 days apart. B, C, D, E, F

ADMINISTRATION:
- No reconstitution required.
- If there is enough vaccine left in the vial for a complete 0.5 mL dose after 10 doses have been removed from the vial, another dose can be drawn and administered. This depends, in part, on the type of syringes and needles used to withdraw doses from the vials; low dead-volume syringes and/or needles should be used if available, as standard syringes and needles may not facilitate the extraction of an additional dose from a single vial.
- Following withdrawal of all available 0.5 mL doses, the residual vaccine from up to three vials may be withdrawn into the same syringe to constitute a full dose provided the vials are from the same manufacturer and the same lot number. See addendum for more information.

Storage and Handling: G
- The vaccine can be stored at:
  - -20°C (-25°C to -15°C) up to the end of its expiry date, kept in the original packaging and protected from light. Do not store on dry ice.
  - +2°C to +8°C for up to 30 days prior to first use, protected from light.
  - Room temperature (up to +25°C) for up to 12 hours.
  - After first vial puncture, the vaccine must be used **within 6 hours**.
  - The vaccine can be pre-loaded into a syringe for up to 6 hours.
  - Ensure that the vial/syringe is clearly labelled with the date and time of first vial entry.

---

A The minimum age for vaccine receipt is based on year of birth (i.e., the vaccine may be offered to individuals who will be turning 18 years of age within the current calendar year), per Provincial Health Officer recommendations.
B Adolescents 16-17 years of age who are **clinically extremely vulnerable** may receive this vaccine if the Pfizer-BioNTech product is unavailable, per Provincial Health Officer recommendations.
C The vaccine series should be completed with the same COVID-19 vaccine product. If it is not possible to determine what product was used for the first dose, or if the same product is unavailable, the second dose may be given with an available mRNA product.
D This is the schedule authorized by Health Canada. However, the current interval between doses in B.C. is based on vaccine supply and operational recommendations as outlined on the government of B.C. website. As of May 27, 2021, the recommended interval between dose 1 and 2 is 8 weeks. If administration of the second dose is delayed, the series does not need to be restarted.
E The minimum interval between doses is 21 days. For optimal response, immunizers should observe recommended intervals as much as possible, however, doses given earlier than recommended may still be considered valid and need not be repeated if minimum intervals are observed.
F NACI recommends that mRNA vaccine (Pfizer BioNTech or Moderna) can be offered as a second dose to individuals who received a first dose of the AstraZeneca/COVISHIELD vaccine, unless contraindicated.
G For more information on storage and handling and temperature monitoring refer to **Appendix E: Management of Biologicals** and **Guidance for Receiving and Handling the Moderna COVID-19 mRNA Vaccine**.
COVID-19 (mRNA)
COVID-19 mRNA Vaccine mRNA-1273 Supplier: Moderna

Storage and Handling (continued):
• Product should be thawed/held prior to use, in one of the following three ways:
  o From the freezer to room temperature; will require 1 hour to thaw
  o From the freezer to the refrigerator; will require 2 hours and 30 minutes to thaw, and then requires at least 15 minutes at room temperature prior to administration.
  o Swirl the vial gently after thawing and between each withdrawal. Do not shake.
• Do not refreeze thawed vials.

BOOSTER DOSES:
No booster doses are recommended at this time.

SEROLOGICAL TESTING:
Serological testing is not recommended before or after immunization.

CONTRAINDICATIONS:
1. History of anaphylactic reaction to a previous dose of the vaccine or to any component of the vaccine.

PRODUCT COMPONENTS:
Other components: cholesterol; 1,2-distearoyl-sn-glycerophosphocholine (DSPC); acetic acid; lipid SM-102; sodium acetate; sucrose; tromethamine; tromethamine hydrochloride.

PRECAUTIONS:
• For the following populations, a complete COVID-19 vaccine series should be offered to individuals in the authorized age group if a risk assessment deems that the benefits outweigh the potential risks for the individual, and if informed consent includes discussion about the limited data on the use of COVID-19 vaccine in these populations:
  o immunosuppressed due to disease or treatment
  o those with an autoimmune condition A
  o pregnancy and breastfeeding B, C
• For individuals with suspected hypersensitivity or non-anaphylactic allergy to COVID-19 vaccine components, consultation with an allergist is advised. If there is a specific concern about a possible allergy to a component of the COVID-19 vaccine being administered, an extended period of observation post-vaccination of 30 minutes may be warranted; alternately, the vaccine can be administered in an emergency room setting, also with a prolonged observation period.
• Wait until symptoms of an acute illness are resolved before vaccinating with COVID-19 vaccine to differentiate symptoms of illness from vaccine side effects. There is insufficient evidence on the receipt of COVID-19 vaccine following receipt of anti-SARS-CoV-2 monoclonal antibodies or convalescent plasma for treatment or prevention of

---

A For more information see the CRA Recommendation on COVID-19 Vaccination in Persons with Autoimmune Rheumatic Disease.
B For more information see the SOGC Statement on COVID-19 Vaccination in Pregnancy.
C A recent study in the United States supports the safety of mRNA COVID-19 vaccines among pregnant people.
COVID-19 (mRNA)  
COVID-19 mRNA Vaccine mRNA-1273  Supplier: Moderna

PRECAUTIONS (continued):
COVID-19. Therefore, COVID-19 vaccination should be deferred for at least 90 days to avoid potential interference of the antibody therapy with vaccine-induced immune response. Deferral is not required following treatment with tocilizumab or sarilumab.

- Individuals diagnosed with Multisystem Inflammatory Syndrome in Children (MIS-C) or Adults (MIS-A) should delay COVID-19 vaccination until they have recovered from illness and for 90 days after the date of diagnosis of MIS-C or MIS-A.
- Due to the theoretical risk that mRNA vaccines may temporarily affect cell-mediated immunity, resulting in false-negative TST or IGRA test results, these tests should be administered and read before COVID-19 immunization or delayed for at least 4 weeks after immunization. COVID-19 immunization may take place at any time after all steps of tuberculin skin testing have been completed.

SPECIAL CONSIDERATIONS:
- COVID-19 vaccines can be administered concomitantly or at any time before or after the administration of another inactivated or live vaccine.
- A complete series of COVID-19 vaccine may be offered to individuals without contraindications who have recovered from PCR-confirmed SARS-CoV-2 infection.
- Recipients should practice public health measures for prevention of SARS-CoV-2 infection and transmission regardless of vaccination with COVID-19 vaccine, at this time.

ADVERSE EVENTS:
Local: pain, swelling, redness, axillary lymphadenopathy. Delayed injection site reactions, with onset on or after day 8 following vaccination, may occur in a small percentage of vaccine recipients, mostly after the first dose.
Systemic: fatigue, headache, myalgia, chills, arthralgia, fever, nausea and vomiting.

REFERENCES:
1. Moderna vaccine product monograph
2. National Advisory Committee on Immunization: Recommendations on the use of COVID-19 Vaccine(s)

ADDENDUM: Pooling residual vaccine from up to three vials to constitute an extra dose

Following withdrawal of all available 0.5 mL doses, a full 0.5 mL dose may be constituted from the residual vaccine volume from up to three separate vials, provided the vials are from the same manufacturer and same lot number. In order to minimize the risk of microbial contaminants and maintain product quality, the following processes should be followed:

- Only vials containing residual vaccine volume are to be used to prepare a full dose when using multiple vials to constitute a single dose. Residual volume should not be combined with contents from a different vial that still contains at least one full dose of the vaccine (to minimize the chance of contaminating the contents of a vial that still contains multiple doses of the vaccine).
- Given this vaccine does not contain preservative, and therefore has a short timeline for its use following first vial puncture (i.e., 6 hours), pooling of residual vaccine from two or three
COVID-19 (mRNA)  
COVID-19 mRNA Vaccine mRNA-1273  
Supplier: Moderna

ADDENDUM (continued):
- vials must occur as soon as possible - it is not recommended to save multiple vials with residual volume for use at one time (e.g., the end of the clinic).
- Perform hand hygiene before handling the vaccine. Strictly adhere to aseptic technique while handling the vaccine and minimize the number of vial punctures.
- Firmly and briskly wipe the surface of the rubber stopper with an alcohol swab for initial and subsequent uses, being sure to apply friction, and allow it to dry for at least 10 seconds.
- To assist with the withdrawal of residual vaccine from the vial, invert the vial and ensure the end of the needle is below fluid level and situated in the groove of the vial stopper.
- Once the residual vaccine is withdrawn, keep the needle in the vial when expelling air bubble(s) to minimize vaccine wastage.
- Check the syringe to ensure it contains the total 0.5 mL dose prior to administration.
- If not administered immediately, the syringe should be clearly labeled with the date and time of the vial with the shortest timeframe for use.