

Immunization Competencies for Nurses

*MODULE 3: CONTRAINDICATIONS AND SPECIAL
CONSIDERATIONS*

Module Outline

Contraindications

Precautions

Special Populations

Obtaining Consent

Resources

Contraindications

- ✓ A COVID-19 vaccine is contraindicated in individuals with a history of anaphylaxis after previous administration of the vaccine at a RCDHU clinic.
- ✓ The vaccine is also contraindicated in persons with proven immediate or anaphylactic hypersensitivity to any component of the vaccine or its packaging.
- ✓ Polyethylene glycol is a potential allergen in the Spikevax (Moderna) and Comirnaty (Pfizer-BioNTech) COVID-19 vaccines known to cause type 1 hypersensitivity reactions.
- ✓ If an individual was diagnosed with myocarditis/pericarditis following a first dose of a mRNA vaccine, at this time a second dose is not to be administered until more is known.

Precautions

- ✓ Patients who have a bleeding problem, bruise easily or use a blood-thinning medicine should receive the vaccine; the condition should be optimally managed prior to immunization to minimize the risk of bleeding.
- ✓ Individuals receiving long-term anticoagulation with either warfarin or heparin are not considered to be at higher risk of bleeding complications following immunization and may be safely immunized through the intramuscular route as recommended, without discontinuation of their anticoagulation therapy.
- ✓ There is some evidence to suggest that intramuscular administration may be safer when given with a small gauge needle (23 gauge or smaller) and when firm pressure is applied to the injection site for 5 to 10 minutes.
- ✓ Vaccination of individuals who may be currently infected with SARSCoV-2 is not known to have a detrimental effect on the illness. However, vaccination should be deferred in symptomatic individuals with confirmed or suspected SARS-CoV-2 infection, or those with respiratory symptoms, in order to avoid attributing any complications resulting from infection with SARS-CoV-2 to vaccine related AEFI and to minimize the risk of COVID-19 transmission at an immunization clinic/venue.

Precautions Cont'd

- ✓ As a precautionary measure wait until all symptoms of an acute illness are completely resolved before vaccinating with an authorized COVID-19 vaccine.
- ✓ Individuals with proven severe allergic reaction (e.g., anaphylaxis) to injectable therapy not related to a component of authorized COVID-19 vaccines (e.g. intramuscular, intravenous, or subcutaneous vaccines or therapies) may be routinely vaccinated and do not need to be assessed. Most instances of anaphylaxis to a vaccine begin within 30 minutes after administration of the vaccine. Therefore, an extended period of observation post-vaccination of 30 minutes should be provided for the aforementioned individuals.
- ✓ Individuals with a history of allergy not related to a component of authorized COVID-19 vaccines or other injectable therapy (e.g. foods, oral drugs, insect venom or environmental allergens) can receive COVID-19 vaccines without any special precautions. Individuals should be observed for a minimum of 15 minutes following vaccination.
- ✓ Additional information on the use of COVID-19 vaccines is available in statements and publications by the National Advisory Committee on Immunization (NACI).
- ✓ For additional general information on precautions, contraindications, concerns refer to Part 2 Vaccine Safety in the Canadian Immunization Guide

Precautions Cont'd

- ✓ For children 5-11 years of age, a few more precautions are in place.
- ✓ NACI recommends that COVID-19 vaccines for children 5-11 years old should not be given concomitantly with other vaccines (live or non-live) at this time. It is recommended to wait at least 14 days BEFORE or AFTER the administration of another vaccine before administration of a COVID-19 vaccine. Concomitant administration may be warranted on an individual basis in some circumstances
- ✓ NACI recommends that children with a previous history of multisystem inflammatory syndrome in children (MIS-C), vaccination should be postponed until clinical recovery has been achieved or until it has been ≥ 90 days since diagnosis, whichever is longer.
- ✓ Children with a history of myocarditis unrelated to COVID-19 vaccination should consult their health care provider for individual considerations and recommendations. If they are no longer under active care for myocarditis, they may receive the vaccine.

Vaccination in Special Populations

- ✓ The following section contains recommendations based on current scientific knowledge based on COVID-19 vaccination for mentioned populations.
- ✓ Check regularly for updates on the Ontario Ministry of Health and Long-Term Care website guidance document "[COVID-19 Vaccination Recommendations for Special Populations](#)" as updates on COVID-19 disease and vaccines are evolving.
- ✓ **In the event of any conflict between mentioned guidance documents and any orders or directives issued by the Minister of Health or the Chief Medical Officer of Health (CMOH), the order or directive prevails.**

Special Populations

Pregnancy

- ✓ All pregnant individuals in the authorized age group are eligible and recommended to be vaccinated as soon as possible, at any stage in pregnancy, as COVID-19 infection during pregnancy can be severe, and the benefits of vaccination outweigh the risks. Vaccination may be considered at any gestational age, including the first trimester.
- ✓ There is no evidence that COVID-19 vaccines have any effect on fertility or chances of becoming pregnant.
- ✓ Evidence also shows a significant and potentially protective antibody titre in the neonatal bloodstream one week after the second dose
- ✓ Tools to support decision making can be found on the Ministry of Health's website:
 - COVID-19 Vaccination: Special Populations - [Vaccination in Pregnancy & Breastfeeding Decision-Making Support Tool for Health Care Providers](#)
 - COVID-19 Vaccination: Special Populations - [Vaccination in Pregnancy & Breastfeeding Decision-Making Tool for Pregnant Individuals.](#)

Special Populations

Breastfeeding

- ✓ COVID-19 vaccines can also be safely given to breastfeeding individuals and recent data shows that mRNA from vaccines do not transfer into breast milk. Anti-COVID-19 antibodies produced by the breastfeeding person have been shown to transfer through the milk and provide protection to the infant. The vaccines are safe for the breastfeeding person and should be offered to those eligible for vaccination.

Special Populations

Autoimmune conditions/Immunocompromised patients (by disease/or treatment)

- ✓ Since all Health Canada authorized COVID-19 vaccines are not live vaccines, they are considered safe in these groups; real-world evidence suggests that many moderately to severely immunocompromised populations do not respond or respond sub optimally to a two-dose series.
- ✓ Moderate to severely immunocompromised persons are strongly encouraged to speak to their HCP regarding the timing of vaccination in relation to their therapy. Clients that fall under this group are recommended to get a 3 dose primary series, and receive a booster dose >84 days from their 3rd dose (extended primary series)
- ✓ Some cases of re-immunization with primary series (ex. Post HSCT)
- ✓ Those with autoimmune or immunodeficiency conditions should be offered the vaccine. It is up to the individual if they choose to consult their HCP prior to vaccination
- ✓ Promote “ring-vaccination” (family/friends receive a full vaccine series)

Special Populations

Allergies

- ✓ Individuals who have had a severe allergic reaction or anaphylaxis to a previous dose of a COVID-19 mRNA vaccine or to any of its components should not receive the mRNA COVID-19 vaccine in a general vaccine clinic.
- ✓ Individuals with known allergies to components of the mRNA vaccines should speak with an appropriate physician or NP for evaluation.
- ✓ This assessment will enable the development of a vaccination care plan which may include receiving the vaccine under the supervision of your physician.

Special Populations

Children and Adolescents

- ✓ The Pfizer-BioNTech vaccine is licensed by Health Canada for children, adolescents and young adults aged 5 years and older.
- ✓ The Pfizer-BioNTech vaccine including pediatric formulation has been proven to be safe in clinical trials and provided excellent efficacy in children and adolescents.
- ✓ Side effects reported in adolescents were similar to those observed in adults and were more frequent after the second dose.
- ✓ Interim clinical findings did not indicate any serious safety concerns and no cases of myocarditis (inflammation of the heart muscle) and/or pericarditis (inflammation of the heart lining) related to the pediatric vaccine were reported.

Resources

- ✓ Tool - *Pre-Screening Questions and Guidance: COVID-19 Vaccine Clinics*
- ✓ COVID-19 Vaccination Recommendations for Special Populations
- ✓ Vaccination in Pregnancy & Breastfeeding Decision-Making Support Tool
- ✓ COVID-19 Vaccination in Pregnancy & Breastfeeding Patient Decision-Making Tool

References

1. NACI recommendations
2. Spikevax (Moderna) Product Monograph
3. Comirnaty (Pfizer-BioNTech) Product Monograph

Quiz

1. Polyethylene glycol is a potential allergen in the Moderna and Pfizer-BioNTech COVID-19 vaccines known to cause type 1 hypersensitivity reactions.

- A) True
- B) False

Quiz

2. The authorized COVID-19 vaccine is contraindicated under RCDHUs medical directive in individuals with:

- A) a history of anaphylaxis after previous administration of the vaccine.
- B) proven immediate or anaphylactic hypersensitivity to any component of the vaccine or its packaging.
- C) a history of fainting after previous administration of the vaccine.
- D) A and B

Quiz

3. Individuals who are pregnant or breastfeeding are not able to receive the COVID-19 vaccine.

- A) True
- B) False

Quiz

4. An evaluation from an appropriate physician or Nurse Practitioner for individuals who have had a severe allergic reaction or anaphylaxis to a previous dose of a COVID-19 mRNA vaccine or to any of its components. Such an assessment is required to assess the method for possible (re)administration of a COVID-19 vaccine.

- A) True
- B) False

Quiz

5. Verbal confirmation of counselling received is required prior to vaccination of COVID-19 vaccines for:

- A) individuals who are pregnant
- B) autoimmune/immunocompromised persons
- C) individuals who are over the age of 65
- D) individuals who are breastfeeding
- E) no longer required but may be strongly encouraged for individuals who are moderate to severely immunocompromised.

Quiz

6. Individuals who are on a blood thinner or have a blood clotting disorder, will need to be monitored following their vaccine for:

- A) 30 minutes
- B) 15 minutes
- C) 1 hour
- D) 45 minutes

Quiz

7. If an individual shows up to a COVID-19 vaccination clinic and screens positive for having symptoms, you should:

- A) go ahead and administer the vaccine but monitor for a longer period of time after vaccination.
- B) tell them they are no longer eligible to receive the COVID-19 vaccine, as they have already developed natural antibodies from having symptoms.
- C) not allow them entry to the clinic that day and advise them to book another appointment when their symptoms have resolved.
- D) None of the above.

Quiz

8. Individuals with proven severe allergic reaction (e.g., anaphylaxis) to injectable therapy not related to a component of authorized COVID-19 vaccines should be monitored following vaccination for:

- A) 1 hour
- B) 30 minutes
- C) 15 minutes
- D) These individuals are not eligible to receive the vaccine at a community clinic.

Quiz

9. Informed consent is required for each individual receiving a COVID-19 vaccine.

- A) True
- B) False