SARS-CoV-2 Vaccines (COVID-19)

What is COVID-19?
COVID-19 is an infectious disease caused by a coronavirus (SARS-CoV-2). COVID-19 was recognized for the first time in December 2019 and has since spread around the world to cause a pandemic. The virus that causes COVID-19 is mainly passed from an infected person to others when the infected person coughs, sneezes, sings, talks or breathes. It is important to note that infected people can spread the infection even if they have no symptoms.

Symptoms of COVID-19 can vary from person to person, in different age groups and depending on the COVID-19 variant. Some people infected with the virus have no symptoms at all, while others have symptoms that range from mild to severe. Even people with mild symptoms may feel unwell for a long time after a COVID-19 infection. The most commonly reported symptoms can include any of the following: new or worsening cough; sore throat, runny nose, shortness of breath or trouble breathing; fever; headache; fatigue; muscle or body aches; diarrhea; loss of smell or taste; headache.

Unvaccinated people are at much higher risk of COVID-19 infection and serious illness, including hospitalization and death, compared to vaccinated people.

What are COVID-19 Vaccines and what are their benefits?
COVID-19 vaccines protect against the SARS-CoV-2 virus (also known as COVID-19). Vaccines work with your immune system, so your body will be ready to fight the virus if you are exposed. Vaccination is one of the most effective ways to protect our families, communities and ourselves against COVID-19. Evidence indicates that the vaccines used in Canada are very effective at preventing severe illness, hospitalization and death from COVID-19.

Doses given after a primary series is complete are called boosters. They help maintain and lengthen your level of protection, as immunity may decrease over time.

A “monovalent” vaccine is the term used for the original COVID vaccines and “bivalent” is the term used for booster vaccines that targets both the original strain of COVID and the Omicron variant of concern. Bivalent vaccines provide improved protection against the Omicron variant.

The following COVID-19 vaccines are available in New-Brunswick and approved for use:
- **Monovalent (original) mRNA vaccines**: Pfizer Comirnaty and Moderna SpikeVax
- **Bivalent mRNA vaccine**: Moderna Spikevax Bivalent Original/Omicron BA.1 and Pfizer Comirnaty Original/Omicron BA.4/BA.5
- **Viral vector-based vaccines**: Janssen Jcovden (Johnson & Johnson)
- **Protein-based vaccine**: Novavax (Nuvaxovid)

How is the vaccine given?
The vaccine is given as an injection into the upper arm in older children and adults and into the thigh in infants.

Who should get a COVID-19 vaccine?
- Everyone is at risk of COVID-19. You should get a COVID-19 vaccine if you are aged 6 months and older. To find out which vaccine is right for you, follow the instructions of your health care provider, local pharmacy or Public Health office to ensure you receive the best protection for your age and health circumstances.
Which COVID-19 vaccine product is recommended for me in a primary series?

Original “monovalent” mRNA vaccines are the recommended choice for all COVID-19 vaccines in a primary series. A bivalent mRNA vaccine is only used as booster dose and not used in a primary series. Depending on your age, some mRNA vaccine products are recommended over other mRNA products because it has a lower rare risk of myocarditis/pericarditis. You can receive either product with an informed consent. This means you have received the full knowledge of the risks and benefits from the health care professional of the COVID-19 vaccination.

- For those aged between 6 months to 29 years old, Pfizer Comirnaty vaccine is recommended.
- For those aged 30 years and older, either the Pfizer Comirnaty or the Moderna Spikevax vaccine is recommended.
- For those who are who are moderately to severely immunocompromised and aged between 6 months to 29 years old may choose to receive the Moderna Spikevax vaccine for their primary series due to a slightly higher immune response and after a discussion with their healthcare provider.
- Individuals who are not able to receive an mRNA COVID-19 vaccine, may be offered other COVID-19 vaccine products:
  - Individuals aged 18 years and older are eligible to receive a Novavax Nuvaxovid COVID-19 vaccine when they are unable or prefer not to receive an mRNA COVID-19 vaccine.
  - Individuals aged 18 years and older are only eligible to receive a Janssen JCovden COVID-19 vaccine (one dose primary series) when all other COVID-19 vaccines (Moderna, Pfizer, Novavax) are contraindicated. A discussion with the health care provider must have occurred.
- Consult with your health care provider, local pharmacy or Public Health office to discuss which mRNA vaccine product is best for you.

Which COVID-19 vaccine product is recommended for me as a booster?

Bivalent Omicron-containing mRNA COVID-19 vaccines are the preferred booster products for those who are eligible. Public Heath recommends that all eligible New-Brunswickers aged 12 and over receive a fall/winter booster dose with a bivalent vaccine regardless of the number of booster doses previously received. Individuals aged between 5 and 11 years old are eligible to receive their first booster with an original monovalent mRNA vaccine. Eligibility and timing for receiving a booster dose is listed on the Government of New-Brunswick COVID-19 vaccines webpage. In a booster series:

- For those aged under 18 years old, Pfizer is the preferred mRNA product.
- For those aged over 18 years old, either Moderna or Pfizer mRNA product is recommended.
- Moderately to severely immunocompromised individuals aged between 12 and 17 years old may choose to receive a Moderna vaccine due to a slightly higher immune response and after a discussion with their healthcare provider.
- Novavax Nuvaxovid is not currently authorized in Canada for use as a booster. Individuals 18 and over who are unble or prefer not to receive an mRNA vaccine may discuss this option with their health care provider.
- Janssen JCovden can only be offered as a first booster, when all other COVID-19 vaccines (Moderna, Pfizer, Novavax) are contraindicated. A discussion with the health care provider must have occurred.

Should you get a COVID-19 vaccine after having a COVID-19 infection?

Yes. Vaccination after a COVID infection is important. The combination of having been infected and also being vaccinated (called hybrid immunity) does provide a strong protection against new variants. Individuals who have been infected with COVID can optimize their benefit of a strong immune response by timing and spacing their next vaccine dose since the time of infection.

Recommended intervals between your infection and your next vaccine dose can be found on COVID-19 vaccines (gnb.ca).

What are the possible side effects of the vaccine?

Side effects can develop in the few days after receiving the vaccines. Although most side effects are not serious to your health, they may make you feel unwell for a few days; they will go away on their own. Some more common and expected side effects include one or more of the following: pain, redness or swelling where the needle was given, tiredness, headache, muscle pain, joint pain, chills, fever.

(Last updated November 3rd, 2022)
It is important to note that you cannot get COVID-19 infection from the vaccine.

What can be done for common side effects to the vaccine?

- Applying a cold compress at the injection site may reduce discomfort.
- For discomfort and fever, you can take or give your child medicine by following the manufacturer’s instructions. Ask your healthcare provider what medicine is best.

Are there any serious side effects to the vaccines?

COVID-19 vaccines are tested during their development according to international standards and then carefully reviewed by Health Canada. Only vaccines that meet the safety, effectiveness and quality standards of Health Canada are approved for use. After they are approved, vaccines continue to be closely monitored to help ensure their safe use. As with all vaccines, rare reactions may still occur. The benefits of all COVID-19 vaccines continue to outweigh the risks of the disease.

Rarely, allergic reactions can occur after receiving a vaccine. Symptoms of an allergic reaction include hives (bumps on the skin that are often very itchy), swelling of your face, tongue or throat, or difficulty breathing. The clinic staff are prepared to manage an allergic reaction should it occur. Seek immediate medical care if you develop any of these symptoms.

Other rare reactions reported after getting a COVID-19 vaccine, by vaccine type:

**mRNA vaccines (original and bivalent):**
- Anaphylaxis
- Myocarditis and pericarditis (inflammation of the heart or lining on the outside of the heart)
- Bell’s palsy (facial paralysis)

**Viral vector vaccines:**
- Anaphylaxis
- Vaccine-induced immune thrombotic thrombocytopenia (VITT), also called thrombosis with thrombocytopenia syndrome (TTS)
- Capillary leak syndrome (CLS)
- Guillain-Barré syndrome (GBS)
- Immune thrombocytopenia (ITP)
- Venous thromboembolism (VTE)

**Protein-based vaccines:**
- Anaphylaxis

Can I receive a COVID-19 vaccine if I am pregnant or breastfeeding?

- Yes. When you are pregnant, you have a higher risk of getting very sick from COVID-19. You are strongly encouraged to complete a primary series and receive a booster dose at any stage of pregnancy. Getting a COVID-19 vaccine lowers your risk of getting seriously ill from the virus.
- If you are pregnant or breastfeeding and have questions about getting a COVID-19 vaccine, talk to your healthcare provider, local pharmacy or Public Health to know which vaccine is best for you.

I am allergic to a component of the vaccine being offered to me, what should I do?

- If you are allergic to a component of the COVID-19 vaccine being offered, you will need to consult with your healthcare provider to determine the most appropriate actions for your situation.

How many doses of a COVID-19 vaccine do I need?

- It is recommended that you receive all doses in your primary series and your booster doses. Staying up-to-date with your COVID-19 vaccinations will offer you the best protection against severe disease, hospitalization and death.
- If you are healthy, a primary series consists of 2 doses with the exception of a 3-dose series for infants and children.
aged between 6 months and under 5 who are receiving the Pfizer Comirnaty vaccine.

- For **moderately to severely immunocompromised individuals**, an additional dose in the primary series is recommended.
- Depending on the vaccines you received and your health situation, talk to your healthcare provider, local pharmacy or Public Health who can advise you of the number of doses you require for best protection.

What other information do I need and where can I find COVID-19 vaccine resources?

- Keep your immunization record in a safe place. Register online at MyHealthNB.gnb.ca to obtain a record of your COVID-19 immunizations. The paper record of COVID-19 Immunization provided when vaccinated will continue to be the official record. Keep a copy and take a picture of it. The paper copy or picture of the copy can be used as proof of vaccination.
- You can find COVID-19 vaccine useful resources at these trusted websites:
  - Living with COVID-19 (gnb.ca)
  - Get the facts | COVID-19 vaccines (gnb.ca)
  - Immunize Canada
  - COVID-19 Vaccines: Authorized vaccines – Health Canada
  - Coronavirus disease (COVID-19) – Health Canada

For additional information, contact your family physician, local Public Health office, or Telecare 811.