

COVID-19 vaccines

We want to provide patients and caregivers with **reliable** information about the COVID-19 vaccines. We share your frustration in trying to follow the various news stories and topics related to COVID-19, especially the vaccines. It is certainly complex to sort out reliable information from some of the "rumors" and social media threads, especially from some of the more "anti-vaxxer" people and organizations. Unfortunately, the uncertainty and the anxiety related to the COVID-19 pandemic seems to have stimulated a variety of people to believe in and circulate a number of conspiracy theories, or frankly, completely inaccurate information.

We completely understand and support the concept of being "vaccine-hesitant" and we suggest that the most reasonable approach is to trust public health experts, as we do. Through post-marketing analysis, we will learn the outcomes of vaccinated patients and the effectiveness of the vaccine, including any potential side effects. In the meantime, we have provided answers to common questions below.

Is the Moderna or any other vaccine one shot?

To our knowledge all the current and coming Covid-19 vaccines will need 2 needles. Some jurisdictions have been discussing withholding the 2nd needle, and using those doses to get more people partly vaccinated. Most experts feel this would be unethical and unscientific – even though there is a soft ethical justification to try and accelerate partial immunity of more members of the herd as opposed to slower complete immunity for a smaller proportion of the herd.

Should I be worried about mRNA technology?

mRNA technology is not new technology. It has been studied for many years and there is no risk of the vaccine altering your own DNA in any way. Here are a few webpages to visit if you would like to learn more:

- [CDC's Understanding mRNA COVID-19 Vaccines webpage](#)
- [NEUROLOGICA blog's mRNA Vaccines webpage](#)
- [Science-Based Medicine's No, the Moderna and Pfizer RNA vaccines for COVID-19 will not "permanently alter your DNA" webpage](#)

Who should not get the vaccine?

Anyone who is hypersensitive or allergic to the COVID-19 vaccines or any of the ingredients should not receive the vaccines. In addition to this, anyone who is suspected to have, or has been, diagnosed with COVID-19 should not receive a vaccine until they have been cleared from public health from self-isolation requirements. It is recommended to wait 14 days after receiving any other vaccine (for example, the flu vaccine) before receiving a COVID-19 vaccine. People who are immunosuppressed or immunocompromised due to either an illness or treatment/medication, and people with an autoimmune disorder were not included in the clinical trials, but we answer this in more detail in the next section.

The vaccines were not tested in younger age groups and therefore individuals under a certain age are not being offered the vaccines. It is also important to note that the vaccines were not tested in pregnant or breastfeeding women during clinical trials, so they were originally excluded in the vaccine rollout, but most recent guidelines including the Society of Obstetricians and Gynecologists of Canada has recommended that the vaccine should be offered to those women. If you are in this group, please talk to your primary healthcare provider.

What if I have inflammatory bowel disease (Crohn's disease or ulcerative colitis)?

Although the vaccines were not initially tested in people who were immunocompromised due to either an illness or a treatment, there is more information becoming available and Canadian guidelines for patients with inflammatory bowel disease have been published. The vaccine is recommended to people with inflammatory bowel disease provided there are no true contraindications to the vaccines as per national and provincial guidelines. For people on immunosuppressive medications or therapies, the vaccine is suggested, however, there may be a risk of the vaccine not working as well due to the diminished immune response (so called *reduced immunogenicity* which means decreased levels of antibodies and decreased protection). Sometimes, if we see reduced antibody levels, we will have to give extra doses of vaccine, such as the high-potency dose of flu vaccine given to elderly people, or a "booster shot" (eg for Hepatitis B) if we determined that the antibody levels are not adequate. This information will hopefully become available in the coming months.

The COVID-19 vaccines do not contain any live virus or any risk of infection directly from the vaccine.

Here are a few webpages to visit if you would like to learn more:

- [The Canadian Association of Gastroenterology's COVID-19 Vaccination in Patients with Inflammatory Bowel Disease guidelines](#)
- [Crohn's & Colitis UK's Coronavirus vaccine for people with Crohn's or Colitis webpage](#)

What about side effects?

We believe, as of January 13th, 2021, the potential benefit of the vaccines is relatively huge and the potential side effects of the vaccines appear to be limited to local reactions like short-lived pain with possible short-lived headache, fatigue, and fevers, as would be seen with any vaccination.

The nature and frequency of rare reactions is yet to be determined. The very rare reactions of concern include potentially serious incidents, such as facial paralysis or Guillain-Barré syndrome. There is extensive research and experience (with other vaccinations prior to COVID-19) on these rare issues. In a given year, either in Canada or in Great Britain, there would be about 20 cases of Guillain Barre syndrome per million people, and if everyone received a certain new vaccine, this number might go up to 21, i.e. one extra case per million vaccinated patients.

There is emerging evidence that the Covid-19 vaccines are even safer than many other previous vaccines.

Where can I learn more about the vaccines that are available?

Here are a few webpages to visit if you would like to learn more:

- [Moderna's Patient Medication Information](#)
- [Ontario Ministry of Health's COVID-19 Vaccine Information Sheet COVID-19 Vaccine](#)

Dr. Lalor, and the IBD medical community, consisting of a large number of international specialists using their expertise and wisdom to make the right recommendations for IBD patients, are excited about the vaccine and we encourage everyone to follow public health recommendations to protect the health and safety of the community at this time.

*Courtney Anderson, MN, Nurse Practitioner.
Eoin Lalor, MB ChB, FRCPC.*