

THE CNMSC COVID-19 RECOMMENDATIONS for People Living with MS

Preamble

The CNMSC is dedicated to enhancing the quality of life of persons with MS. For updated information for Canadians living with MS, please visit the [MS Canada website recommendations](#).

The CNMSC, our partners, and the MS community have a shared responsibility in slowing the spread of the COVID-19 pandemic. Safe and effective vaccination will bring us closer to this goal.

Vaccines and safety in MS

Multiple vaccines against COVID-19 are approved in Canada (Pfizer-BioNTech and Moderna). These mRNA vaccines appear very effective in preventing COVID-19 infection in healthy subjects. However, the duration of protection may be dependent on dominant variants, time since last vaccination, and other factors.

COVID-19 vaccination is safe for people with MS and safe to take while taking MS medications (Blanco et al. *Neurology* 2023). COVID-19 vaccinations are safe to get at the same time as other vaccinations. Receiving COVID-19 vaccination does not cause or worsen MS (Zanetta, Rocca & Filippi. *Rev Clin Immunol* 2022; Stephanou et al. *Mult Scler* 2023).

The CNMSC position is that full immunization should be considered for every person with MS (adults and children), Neuromyelitis Optica Syndrome Disorder or MOG Antibody Associated Disorder. This includes pregnant and breastfeeding women and children, to be discussed individually in weighing potential risks and benefits. This statement is congruent with the recommendations of The National Advisory Committee on Immunization (NACI) which advises the Public Health Agency of Canada.

Side effects of the vaccines are common but mild to moderate and last hours to a few days. Fever occurs in up to 15% of individuals after vaccination and should be treated with antipyretics (acetaminophen preferred) to prevent accentuation of MS symptoms or pseudo-relapse. Serious adverse events from the two mRNA vaccines approved in Canada are rare. Healthcare providers are therefore strongly encouraged to promptly report any serious event potentially related to the vaccines to the manufacturer. The general sanitary protective measures issued by public health agencies across Canada must continue to be followed after vaccination since it takes time for vaccines to generate protective immunity ([Health Canada](#)). This includes wearing a well-fitting face mask in settings with a risk of COVID exposure (e.g., crowded events particularly if indoors, medical appointments, caring for a symptomatic person).

Vaccines and MS treatment

Vaccination should not interfere with the most appropriate MS treatment plan for that individual. Scheduling the timing of vaccination is not always possible with taking MS medications, and simply getting the vaccine, whenever it may be available, is probably more important. Data now indicate that vaccine responses can be measured (either with antibody formation or immune cell reactivity) in patients taking all current disease-modifying medications and there is no need to hold or postpone these medications in favour of timing immunizations.

Data generated from real-world experience of people with MS who have had COVID-19 infections, COVID-19 vaccinations, research into how vaccinations affect people with MS, in addition to expert opinion concerning MS treatment and COVID-19 vaccines guide the following recommendations, which are very similar from country to country. As new data is available to inform on safety of DMT and COVID and/or DMT and COVID vaccinations, we will update our recommendations.

Having MS does not mean you are immunocompromised. However, some of the DMTs are immunocompromising:

Conventional injectable drugs (interferons and glatiramer acetate), first-line oral therapy (teriflunomide [Aubagio] and dimethyl fumarate* [Tecfidera]) and natalizumab [Tysabri] do not impair the immune responses to conventional vaccines to any significant degree. These drugs are not expected to reduce the immune response to the current vaccines against COVID-19. Therefore, no dosing modification is recommended for vaccination. If the vaccine is administered before the start of treatment, no delay is required. (*Most patients taking dimethyl fumarate have normal lymphocyte counts, but many may have lower numbers, warranting further discussion with your Neurologist.) Both dimethyl fumarate and natalizumab can compromise immune function and pose risks for opportunistic infections such as Herpes Zoster or the JC virus (which causes PML).

S1P antagonists (fingolimod [Gilenya], siponimod [Mayzent] and ozanimod [Zeposia]) likely reduce the antibody immune response to vaccines. However, overall, there appears to be adequate immune response to vaccinations with repeated dosing, and higher rates of breakthrough COVID infections are not seen in patients using this class of medication.

Lymphocyte depleting therapies:

By definition, all of these agents are immunosuppressive due to their depleting of immune cells.

Alemtuzumab [Lemtrada] should be used with caution during the pandemic because of theoretical risks of infection during the cell depletion phase. Cell repletion is believed to allow an adequate immune response to vaccines from six months after each yearly cycle for both series of dosing. A delay of only three months may be acceptable if lymphocytes have recovered to near normal. Furthermore, the following treatment cycle may be delayed if required to maximize vaccination response, depending on disease activity. If the vaccine is administered before the start of treatment, a delay of at least 2 weeks is recommended. Work with your MS healthcare provider to determine the best schedule for you.

Cladribine [Mavenclad] If you are about to start Mavenclad, consider getting fully vaccinated* at least 2-4 weeks before starting Mavenclad. If you are already taking Mavenclad, the currently available limited data does not suggest that timing of the vaccine in relation to your Mavenclad dosing is likely to make a significant difference in vaccine response. Patients on Mavenclad do not appear to develop flu-like/upper respiratory illnesses in numbers exceeding what is seen in the general population. Getting the vaccine may be more important than coordinating timing of the vaccine with your Mavenclad treatment. If you are due for your next treatment course, when possible, resume Mavenclad at least 2 weeks after getting fully vaccinated*. Work with your MS healthcare provider to determine the best schedule for you.

Intravenous (ocrelizumab [Ocrevus] and rituximab [Rituxan]) and subcutaneous (ofatumumab [Kesimpta]) anti-CD20 medications are the only MS treatments for which some evidence suggests both an increased susceptibility to COVID-19, and a more severe COVID-19 course of infection (however, the actual numbers of such patients remains small). Newer evidence, however, suggests that adequate vaccine responses can be measured in patients using any of these medications whenever the vaccine is given.

High-Dose Steroids for Relapse [Prednisone or Methylprednisolone] should only be given if necessary. Work with your MS healthcare provider to determine the best schedule for you regarding receiving COVID vaccination around the time of relapse and steroid treatment.

PAXLOVID (Nirmatrelvir/Ritonavir): Paxlovid is strongly recommended for those patients who are: older (>60); are taking immune-compromising drugs; or who lack vaccination to COVID. The recommendations are both age and drug-related and there are known exclusions. Paxlovid should be taken within 5 days of contracting COVID to be most effective. There may be restrictions of use for people with significant liver or kidney dysfunction and interactions with other medications. A pharmacist can advise regarding any significant interactions with therapies you may be taking. There is no evidence that Paxlovid has any untoward effects on patients with MS or interferes with any current disease-modifying medications.