

Third doses of COVID-19 vaccine for moderately to severely immunocompromised Nova Scotians

The National Advisory Committee on Immunization (NACI) strongly recommends that individuals who are moderately to severely immunocompromised and who have previously received a primary COVID-19 vaccine series (with a homologous or heterologous schedule using mRNA or viral vector vaccines) receive an additional dose of mRNA COVID-19 vaccine at least 28 days following completion of the primary series.

Moderately to severely immunocompromised includes individuals with the following conditions:

- Active treatment for cancer
- Receipt of solid-organ transplant and taking immunosuppressive medication
- Receipt of CAR-T therapy or stem cell transplant (bone marrow transplant) within 2 years or stem cell transplant (bone marrow transplant) and taking immunosuppressive medication
- Moderate to severe primary immunodeficiency* (e.g. Common Variable Immunodeficiency, Chronic Granulomatous Disease, X-linked Agammaglobulinemia) [More information regarding primary immunodeficiency may be found below*]
- HIV and a CD4 count less than 200
- Active treatment with the following categories of immunosuppressive therapies: anti-B cell therapies (i.e. rituximab/Rituxan®, ocrelizumab/Ocrevus®), high-dose steroids, alkylating agents (i.e. cyclophosphamide), high-dose antimetabolites (i.e. azathioprine, methotrexate), tumor-necrosis factor (TNF) inhibitors (i.e. infliximab/Remicade®, adalimumab/Humira®) and other biologic agents that are significantly immunosuppressive (i.e. ustekinumab/Stelara®, secukinumab/Cosentyx®) [A full list of eligible medications here is found here: <https://novascotia.ca/dhw/cdpc/documents/immunosuppressive-medication-list.pdf>]

Primary Immunodeficiency: Eligibility for a third dose of COVID-19 Vaccine in Nova Scotia

NACI recommends that patients with moderate to severe primary immunodeficiency receive a third dose of COVID-19 vaccine to optimize protection. Most primary immunodeficiency conditions are quite rare. A full list of primary immunodeficiencies can be found on the [Immunodeficiency Canada website](#).

Not all primary immunodeficiencies cause immunosuppression severe enough to predictably reduce vaccine effectiveness of a standard two dose series of COVID-19 vaccines.

Patients with the following primary immunodeficiencies are not eligible for a third dose:

- Glycogen Storage Disease
- Goodpasture Syndrome
- Hereditary angioedema
- Hyper-IgD Syndrome
- Immunodysregulation, Polyendocrinopathy and Enteropathy, X-linked
- Mannose Binding Lectin Deficiency
- Selective IgA deficiency
- Selective IgM deficiency
- Transient Hypogammaglobulinemia of Infancy
- Unspecified Hypogammaglobulinemia