

Moderately to Severely Immunocompromised Individuals Aged 18-29 Years

- Both mRNA Pfizer-BioNTech Comirnaty and Moderna Spikevax vaccines are safe and provide very good protection against symptomatic illness, hospitalization and death from COVID-19.
- While the Pfizer-BioNTech Comirnaty vaccine is the preferred product for individuals aged 18 to 29 years, the Moderna Spikevax vaccine may be considered for those who are moderately to severely immunocompromised.
- Latest evidence suggests that the Moderna Spikevax vaccine may have a slightly higher vaccine effectiveness and may provide longer protection against infection and severe COVID-19 outcomes compared to the PfizerBioNTech Comirnaty vaccine in individuals who are moderately to severely immunocompromised.

How do I know if I am moderately to severely immunocompromised?

Moderately to severely immunocompromised includes people with the following conditions:

- Active treatment for solid tumour or hematologic malignancies
- Receipt of solid-organ transplant and taking immunosuppressive therapy
- Receipt of chimeric antigen receptor (CAR)-T-cell therapy or hematopoietic stem cell transplant (within 2 years of transplantation or taking immunosuppression therapy)
- Moderate to severe primary immunodeficiency (e.g., DiGeorge syndrome, Wiskott-Aldrich syndrome)
- Stage 3 or advanced untreated HIV infection and those with acquired immunodeficiency syndrome
- Active treatment with the following categories of immunosuppressive therapies: anti-B cell therapies (monoclonal antibodies targeting CD19, CD20 and CD22), high-dose systemic corticosteroids (prednisone equivalent of ≥ 2 mg/kg/day or 20 mg/day if weight > 10 kg, for ≥ 14 days), alkylating agents, antimetabolites, or tumor-necrosis factor (TNF) inhibitors and other biologic agents that are significantly immunosuppressive.

What do I need to know?

- Rare cases of myocarditis and/or pericarditis following vaccination with COVID-19 mRNA vaccines have been reported in Canada and internationally
- Myocarditis is an inflammation of the heart muscle and pericarditis is the inflammation of the outer lining of the heart.
- Myocarditis and/or pericarditis can occur as a complication in people who are infected with COVID-19.
- Latest research suggests the risk of myocarditis following vaccination with a COVID-19 mRNA vaccine **is lower** with the Pfizer-BioNTech Comirnaty vaccine compared to the Moderna Spikevax vaccine, particularly after a second dose in males 12 to 29 years of age.
- Most cases have been mild and resolved quickly.

If you are an individual aged 18 to 29 years who is moderately to severely immunocompromised, and you still have questions, it is recommended that you discuss vaccination with a primary health care provider to determine which mRNA vaccine product is best for you.