

# Coronavirus COVID-19

BC Centre for Disease Control | BC Ministry of Health

## Clinical guidance on COVID-19 vaccination for people who are clinically extremely vulnerable (CEV)

This guidance is intended for healthcare providers and is based on known evidence as of April 18, 2023. These guidelines have been created to inform and guide clinical decision making for these patient populations.

To find specific information about vaccine efficacy, timing considerations, any contraindications or exceptions for people with the following medical conditions can be found on the BCCDC website (linked below):

### Autoimmune diseases

- [Clinical Guidance on COVID-19 Vaccines for Persons with Autoimmune Rheumatic Diseases](#)
- [Clinical Guidance on COVID-19 Vaccines for People with Autoimmune Neuromuscular Disorders Receiving Immunosuppressive/ Immunomodulating Therapy](#)

### Cancers

- [Clinical Guidance on COVID-19 Vaccines for People with Solid Cancers](#)
- [Clinical Guidance on COVID-19 Vaccines for People with Hematological Malignancy](#)

### Cystic Fibrosis

- [Clinical Guidance on COVID-19 Vaccines for People with Cystic Fibrosis](#)

### Hematologic

- [Clinical Guidance on COVID-19 Vaccines for People with Paroxysmal Nocturnal Hemoglobinuria \(PNH\) and Atypical Hemolytic Uremic Syndrome \(aHUS\)](#)
- [Clinical Guidance on COVID-19 Vaccines for People with Sickle Cell Disease](#)
- [Clinical Guidance on COVID-19 Vaccines for People with Thalassemia](#)
- [Clinical Guidance on COVID-19 Vaccines for People with Hematological Malignancy](#)

### Inborn Errors of Metabolism

- [Clinical Guidance on COVID-19 Vaccines for People with Metabolically Unstable Inborn Errors of Metabolism \(IEM\)](#)

### Inflammatory Bowel Disease

- [Clinical Guidance on COVID-19 Vaccines for Persons with Inflammatory Bowel Disease](#)

### Kidney/Renal

- [Clinical Guidance on COVID-19 Vaccines for People with Kidney Disease](#)

### Neuromuscular

- [COVID-19 Vaccines for People with Significant Neuromuscular Conditions Who Require Respiratory Support](#)
- [Clinical Guidance on COVID-19 Vaccines for People with Autoimmune Neuromuscular Disorders Receiving Immunosuppressive/ Immunomodulating Therapy](#)

### Pregnant people with heart disease

- [COVID-19 Vaccines for Pregnant People with Heart Disease](#)

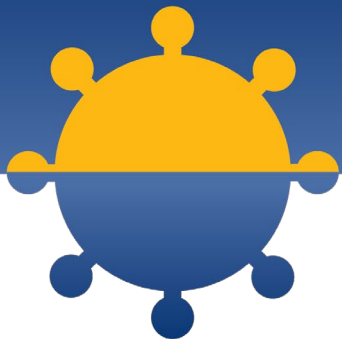
### Splenectomy

- [Clinical Guidance on COVID-19 Vaccines for People with Splenectomy or Functional Asplenia](#)

### Transplant

- [Clinical Guidance on COVID-19 Vaccines for Solid Organ Transplant Recipients](#)





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## Background and Context

This guidance is based on a review of the vaccines approved by Health Canada, and available in BC, for the prevention of COVID-19 disease caused by the SARS-CoV-2 virus:

- **mRNA vaccines:** tozinameran (COMIRNATY, Pfizer-BioNTech),<sup>1</sup> tozinameran and riltozinameran (COMIRNATY Bivalent original & BA.1, Pfizer-BioNTech),<sup>2</sup> tozinameran and famtozinameran (COMIRNATY Bivalent original & BA.4/BA.4, 1Pfizer-BioNTech),<sup>3</sup> elasomeran (SPIKEVAX, Moderna),<sup>4</sup> elasomeran and imelasomeran (SPIKEVAX Bivalent original & BA.1, Moderna)<sup>5</sup>
- **Viral vector vaccine:** Ad26.COV2.S (JCVODEN, Janssen)<sup>6</sup>
- **Recombinant protein vaccine:** COVID-19 Vaccine (recombinant protein, adjuvanted) (NUVAXOVID, Novavax)<sup>7</sup>

Currently, anyone in British Columbia who is 6 months and older is eligible for COVID-19 immunization. The mRNA vaccine SPIKEVAX (Moderna) and COMIRNATY (Pfizer-BioNTech) have been approved for children 6 months to 11 years of age, with young children getting a smaller dose of the same vaccine used for youth and adults.<sup>8</sup> The National Advisory Committee on Immunization (NACI) has released their statements for these age groups.<sup>9,10,11</sup>

People who receive the mRNA vaccine (COMIRNATY [Pfizer-BioNTech] or SPIKEVAX [Moderna]) for their first dose will be offered either mRNA vaccine for subsequent doses, with the exception of preferential recommendations based on age and immunosuppression.<sup>12</sup> BC has proactively expanded booster doses for all individuals 5 years and older, not just those at high risk. However, it is particularly recommended for individuals 5-17 years of age at [higher risk of severe illness](#) due to COVID-19.<sup>13,14</sup> All booster doses will be mRNA vaccines.<sup>15</sup> For those who are not able, or willing, to receive mRNA vaccines, Novavax vaccine is available as an alternative for individuals 12 years of age and older.

### Third doses as part of primary vaccine series:

Recent studies demonstrate that some people who are immunocompromised develop an improved antibody response after a third dose of vaccine.<sup>16</sup> Therefore, moderately to severely immunocompromised people in B.C. are eligible to receive a third dose of an mRNA COVID-19 vaccine as part of their primary vaccine series. NACI recommends the SPIKEVAX (Moderna) for children 6 months to 4 years of age.<sup>9,17</sup> A minimum interval of 28 days between dose 2 and dose 3 is recommended for those eligible for a third dose. As per the B.C. Immunization Manual, SPIKEVAX (Moderna) is preferred for children 6 months to 4 years of age, and COMIRNATY (Pfizer-BioNTech) is recommended for those 5-11 years of age. For individuals 12 years of age and older, SPIKEVAX (Moderna) is preferred for the third dose, but if it is unavailable (or if the individual prefers), COMIRNATY (Pfizer-BioNTech) may be provided.<sup>18</sup>

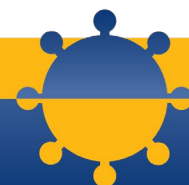
If you have fever, a new cough, or are having difficulty breathing, call 8-1-1.



Ministry of Health



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Specifics on current eligibility for a third dose may be reviewed here: <https://www2.gov.bc.ca/gov/content/covid-19/vaccine/plan#clinically-vulnerable>

### **Booster doses:**

Since October 2022, NACI has recommended that bivalent Omicron-containing mRNA COVID-19 vaccines are the preferred booster products for the authorized age groups (at the time, the bivalent vaccine was authorized for individuals 12 years of age and older). This authorization was expanded to all individuals 5 years of age and older following Health Canada's authorization of the bivalent Pfizer-BioNTech Comirnaty mRNA 10 microgram product for children 5 to 11 years of age in December 2022.<sup>19</sup> NACI recommends that anyone who has not received a COVID-19 booster shot in the fall of 2022 get one as soon as possible. Individuals 12 years of age and older who received a monovalent product for their fall booster dose may be offered a bivalent product at least 6 months following their last dose.<sup>20</sup>

An additional spring 2023 booster dose is recommended by NACI for those individuals at the highest risk of getting severely ill from COVID-19.<sup>21</sup> In BC, people aged 80 and older (70 years and older for indigenous peoples), people living in long-term care (LTC) and alternate level of care clients awaiting placement in LTC, and people aged 18 and older who are immunocompromised are encouraged to book a vaccine appointment. People aged 65 to 79 years (55-69 years for indigenous peoples) who have never had COVID-19 may be offered a spring booster dose as well. Older age is a very important risk factor for severe disease. The risk of hospitalization and intensive care admission increases with age. Bivalent Omicron-targeting mRNA COVID-19 vaccines continue to be the preferred booster products.

### **Patients who have tested positive for COVID-19:**

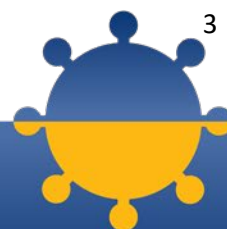
Accumulating evidence shows that those with hybrid immunity (i.e., a history of at least two doses of COVID-19 AND a prior COVID-19 infection) are well-protected against severe outcomes of hospitalization and death. Booster doses may be deferred in those who have tested positive for COVID-19 until 6 months from symptom onset or, for asymptomatic cases, from the time of the positive test.<sup>22</sup> This suggested interval is based on immunological principles and expert opinion. When considering whether or not to administer vaccine doses following the suggested 6-month interval, biological and social risk factors for exposure (e.g., local epidemiology, circulation of VOCs, living settings) and severe disease should also be taken into account. As these intervals are to be used as a guide, clinical discretion is advised.

COVID-19 vaccine may be offered to individuals at any time following recovery from SARS-CoV-2 infection.

### **Intervals between doses in the primary series:**

Clients requesting a shorter interval between doses should be informed that this offers less optimal protection, but their request for an earlier dose should be granted, without the need for Medical Health Officer approval, provided the minimum interval between doses has been observed.<sup>23</sup>

The minimum interval between completion of the primary series, or a previous booster dose, and the Fall booster dose is 5 months.<sup>24</sup> This revised minimum interval also applies to pregnant people and aligns with NACI's Updated guidance on COVID-19 vaccines for pregnant or breastfeeding individuals. The exception is JCVODEN (Janssen), for which the minimum interval is 8 weeks between the single dose of JCVODEN (Janssen) and the booster dose.<sup>24</sup>



## Other vaccines:

### JCVODEN (Janssen)<sup>6</sup>

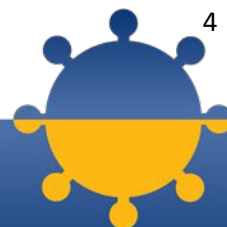
The JCVODEN<sup>6</sup> one-dose viral vector vaccine is now in limited supply in B.C. However, mRNA vaccines are preferred over viral vector vaccines due to better effectiveness and immunogenicity of mRNA vaccines and the possible adverse effects specifically associated with viral vector vaccines (e.g., Thrombosis and Thrombocytopenia Syndrome [TTS]). A viral vector COVID-19 vaccine should only be considered when all other authorized COVID-19 vaccines are contraindicated or have been refused due to the reduced effectiveness and the possible adverse effects associated with viral vector vaccines (e.g., TTS).

### NUVAXOVID (Novavax)<sup>7</sup>

NUVAXOVID<sup>7</sup> is a different class of vaccination, a protein subunit vaccine, that will give British Columbians another option to protect themselves against COVID-19. NUVAXOVID may be offered to individuals for whom COVID-19 mRNA vaccines are contraindicated or have been refused. This vaccine is available to people aged 12 years and older.<sup>25</sup> It is a two-dose vaccine, and a limited number of doses is available in B.C.<sup>26</sup>

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## Authors

Clinically Extremely Vulnerable Populations Task Force

