

**To:** Nova Scotia Health Care Practitioners and Immunizers

**From:** Dr Shelley Deeks, Deputy Chief Medical Officer of Health

**Date:** March 17, 2023

**Re:** *Spring booster dose for individuals at highest risk*

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On March 3, 2023, the National Advisory Committee on Immunization (NACI) published [guidance on an additional COVID-19 booster dose in the spring of 2023 for individuals at highest risk of severe illness due to COVID-19](#). Given the uncertainty in both the evolution of the pandemic and duration of protection from COVID-19 vaccines, these recommendations were deemed by NACI as discretionary.

In response, we have made the following updates to the Nova Scotia COVID-19 vaccine program to protect those at highest risk of disease:

1. Starting today, the following groups will be eligible for an additional dose of COVID-19 bivalent vaccine, as part of a targeted spring vaccination program which will run until the end of June 2023:
  - Adults 80 years of age and older
  - Adults (18 years and older) living in long-term care or nursing homes, senior congregate living settings, or residential care facilities.
  - Adults (18 years and older) who meet the defined criteria of [moderately to severely immunocompromised](#).
  - Adults aged 65 to 79 years
    - i. While eligibility will be open for this cohort, it is particularly those who do not have a known prior history of SARS-CoV-2 infection who should consider receiving the spring booster as this population does not benefit from hybrid immunity (immunity from both infection and vaccination). There is some evidence that vaccine protection may reach a plateau for adults with hybrid immunity, with limited benefit in receiving an additional booster dose.
  - Nova Scotia is also working with African Nova Scotian and First Nations communities to offer a spring dose to those aged 50 to 79 from these communities.
2. The COVID-19 vaccine booster interval is now 6 months (168 days) since last COVID-19 vaccine or SARS-CoV-2 infection for all populations.
  - This change is guided by NACI recommendations and accumulating evidence that a longer interval is associated with more sustained protection following subsequent booster doses.
3. Individuals who are not eligible for the spring booster, but who have received a booster dose of COVID-19 vaccine since September 19, 2022, are considered to be up to date with COVID-19 vaccination at this time. Individuals who have not received

previously recommended doses (primary series or booster dose, including a booster since the fall of 2022) continue to be eligible to receive missed doses.

### Considerations

As NACI's recommendations are discretionary, health care providers can support eligible individuals in deciding whether to receive the spring dose. It is important to consider the following:

- Age continues to be a risk factor for severe disease from COVID-19, with those 80 years and older at the highest risk.
- Waning of protection from vaccination occurs most rapidly in older age groups however the duration of protection following booster doses is not yet known.
- Hybrid immunity results from at least one exposure to SARS-CoV-2 infection and COVID-19 vaccination and may provide superior protection against disease, including higher and longer lasting protective antibody levels. The greatest impact of booster vaccination may be among those who have not previously been infected with SARS-CoV-2.
- A number of older adults in Nova Scotia have no previous history of SARS-CoV-2 infection and therefore do not have the benefits of hybrid immunity.

Although there continues to be many uncertainties around COVID-19 epidemiology, we are anticipating that there will be a COVID-19 vaccine campaign in the fall of 2023. As such, the spring dose should be offered in a time frame that allows the appropriate 6 month interval before a fall vaccination program. While the evolutionary trajectory of SARS-CoV-2, including the emergence of novel variants of concern remains unknown, there is a resurgence of other respiratory infections in the fall and winter and it is reasonable to expect that we may also see an increase in COVID-19, therefore, protection during that time is expected to be of greatest benefit.

For more information, please review the NACI [statement](#) or [summary](#). Thank you to all providers for your ongoing contributions to the COVID-19 vaccination efforts in Nova Scotia.