

COVID-19 Vaccine Timing Protocols

March 2021

Background

BC's vaccination program against COVID-19 began in December 2020. Supplies were limited of the Pfizer-BioNTech vaccine (the first vaccine approved for use in Canada). Initial vaccinations began with health care workers in long-term care settings as the first priority group. Within a couple of weeks, the Moderna vaccine received Health Canada approval and it too began its distribution across BC to high priority groups. In late February 2021, the AstraZeneca vaccine received approval with anticipated delivery into March/April 2021. The federal government continues to project that by the end of September 2021, any Canadian who wishes to receive a COVID-19 vaccine will have opportunity to do so.

According to BC's Public Health Officer, Dr. Bonnie Henry, BC's vaccine delivery approach is based on scientific evidence, available supply and resource allocation while also balancing the needs of those at highest risk to be most severely impacted by COVID-19. No one would argue vaccine delivery has gone perfectly but most recognize the complexities in vaccine delivery and certainly recognize that there are many elements of vaccine roll-out that need to be balanced in deference to competing concerns, resources and challenges.

While there has been criticism of vaccine delivery as well as comparisons of BC to the way in which Israel has rolled-out vaccine delivery, the latest round of criticism has been focused on the time between first and second vaccine doses. On December 24, 2020, Dr. Henry noted that BC would delay second doses of the vaccine to 35 days, primarily to maximize the delivery of the vaccine. As Dr. Henry noted, while the manufacturers of both the Pfizer BioNTech and Moderna vaccines recommend shots be spaced out 21-28 days, the planned delay of 35 days would still ensure maximum efficacy while also allowing for more vaccine to be distributed to high priority recipients and communities.

Moreover, a group of healthcare providers penned a letter to Adrian Dix, BC Minister of Health and Dr. Henry questioning the decision to delay second doses arguing that doing so is unethical, unsafe and not based on scientific evidence.ⁱ Evidence from the WHO's Strategic Advisory Group of Experts on immunization, known as SAGE, noted that while 21-28 days was ideal that there could be supply issues and/or other mitigating circumstances such that the interval between doses may be extended up to 42 days.ⁱⁱ On January 14, 2021 the Council of Chief Medical Officers of Health issued a statement speaking to recent work by the National Advisory Committee on Immunization (NACI), supporting the SAGE perspective accepting the up to 42-day interval.^v

It is worth noting that given the newness of these vaccines evidence is still being gathered, and the global scientific community continues to analyze the science consistently and frequently. However, as Dr. Henry noted in the midst of a global pandemic it seems unfathomable to leave vaccine 'in the freezer'. Therefore, the need to vaccinate as many as possible as quickly as possible, while not without some risk, must be balanced between the 21-28 day 'ideal'. NNPBC respects that both Pfizer BioNTech and Moderna have noted that they would like all jurisdictions using these vaccines to use as specified, but acknowledges that SAGE and NACI have both provided guidance given our current exceptional circumstances.

As new research has been gathered, it has become clearer that delaying vaccine does not negatively impact its efficacy. On March 1, 2021, Dr. Bonnie Henry announced second doses of Canada's three approved vaccines would be extended to 16 weeks, or four months. This is based on evidence gathered from around the world that has determined that these vaccines remain highly effective into these extended time frames. This approach will greatly expand the pool of available vaccine to be delivered to more people in a shorter period of time.

It has been noted many times, but we are living in extraordinary circumstances. COVID-19 has taken a massive toll on the health system, providers and most certainly on our collective mental health. People are exhausted and health providers are at the top of the list for those who are exhausted, overwrought and overworked. What everyone must remember is that vaccine delivery is highly complex, BC is a large province with a dispersed high-risk population, and that evidence is evolving on COVID-19 vaccines. Many of us are anxious about vaccine roll out (when will I get mine, when will I know, who will tell me) and NNPBC appreciates heightened emotions. We must continue to pay attention to the evidence, while also respecting the need to distribute vaccines in a complex health care system.

Key Messages

- Nurses are key drivers in vaccine uptake and compliance and will help to end this pandemic by offering their expertise in vaccine delivery. However, it will remain important that nurses take a balanced and thoughtful approach to understanding the intricacies and complexity of managing and recovering from COVID-19.
- The Federal Government anticipates that by September, any Canadian who opts to receive a COVID-19 vaccine will be able to receive one.
- BC's vaccine delivery program is based on science, resource allocation and need, ensuring that high risk groups are vaccinated in priority order.
- There have been many comparisons of Canada's and BC's vaccine roll out to other countries, notably Israel who have been able to vaccinate a large portion of their population in quick order. However, these comparisons are not accurate as both the population and our geography are very different.
- Both Pfizer BioNtech and Moderna require two doses of vaccine at a recommended 21-28 days apart.
- The World Health Organization has noted that while the 21-28 days are ideal scenarios that countries must balance, need, supply and resource issues in a complex decision-making process that must also be readily actionable.
- The WHO has also noted that vaccines can safely be given up to 42 days apart. BC's target of 35 days is well within this range.
- On March 1, 2021 Dr. Bonnie Henry announced that second doses of vaccines would be extended to 16 weeks.
- Critical thinking and critiques are not wrong or problematic. However, criticism without considering the complexities of balancing doses, with resources and need do not necessarily represent a full picture.
- Scientific evidence is paramount in our understanding of COVID-19, but equally as important is being adaptive to the evidence as new issues and challenges emerge.

Further Reading/Resources

- [BC Government, COVID 19 vaccines](#)
- [Government of Canada: Guidance on the Prioritization of initial doses of the COVID-19 vaccine](#)
- [WHO SAGE values framework for the allocation and prioritization of COVID-19 vaccination](#)
- [WHO Roadmap for Prioritizing Population Groups for Vaccines Against COVID-19](#)
- [British Medical Journal: Covid-19 vaccination: What's the evidence for extending the dosing interval?](#)
- [Doctors and nurses want B.C. to rethink 'extremely alarming' delay to 2nd COVID-19 vaccine dose](#)

Please feel free to direct questions and additional comments to info@nnpbc.com.

ⁱ <https://www.cbc.ca/news/canada/british-columbia/bc-covid-19-vaccine-second-dose-delayed-1.5865482>

ⁱⁱ <https://www.cbc.ca/news/health/who-vaccine-interval-recommendation-1.5865889>