



COVID-19- Fourth Wave

August 2021

Background

Since the declaration of COVID-19 global pandemic in March of 2020 several 'waves' of COVID-19 have been noted. The last wave, the third wave, occurred in Canada largely in the spring of 2021 as immunization programs had just begun. However, as immunization programs across the country moved into full swing as vaccination supply increased, COVID-19 cases went down, hospitalizations and ICU numbers stabilized, and Canadians overwhelmingly rolled up their collective sleeves to receive one of Canada's approved vaccinations against COVID-19. By the end of July 2021, Canada had administered over 49 million vaccinations, almost 60% of our total eligible population (12 and over) has been fully immunized and over 80% have been partially immunized.ⁱ In British Columbia as of the end of July 2021, over six million doses of an approved COVID-19 had been administered, 81% of the eligible population (12 and over) had received a first dose of a COVID-19 vaccine, and 64.9% had received a second doseⁱⁱ. Without a doubt, COVID-19 vaccines approved for use in Canada have made a profound and significant impact in the fight against COVID-19, and Canadians are among the most COVID-19 vaccinated people in the world.

However, recently numbers of COVID-19 cases have been on the rise fueled largely by the Delta variant first detected in Indiaⁱⁱⁱ. In BC we have seen a dramatic rise in the number of cases over the last several weeks, with our daily case count rolling average increasing steadily. In mid-July 2021, the Delta variant was estimated to account for one-third of all cases in BC, with the recognition that this number would only increase as the Delta variant has been determined to be highly transmissible. During the same time frame, the Delta variant was estimated by the WHO to be the dominant strain worldwide and the US Center for Disease Control (US CDC) estimated that Delta made up approximately 70% of cases in the United States.^{iv} The Delta variant, as noted, is highly transmissible, as easily transmitted as chicken pox according to some sources and is spreading very quickly. Underscoring its transmissibility, the US CDC has noted that vaccinated individuals who test positive for the Delta variant have the same viral load as unvaccinated/partially vaccinated people^v. While breakthrough infections, or infections amongst fully vaccinated individuals, of Delta have occurred, COVID-19 vaccines are doing their job in that fully immunized individuals are much less likely to become seriously ill and, if symptomatic, are well protected against negative outcomes including hospitalization and death. The primary concern remains for those individuals who are not vaccinated and/or are partially vaccinated.

This concern is so acute that it prompted Canada's Medical Health Officer, Dr. Theresa Tam to warn on July 30th, of a 'Delta driven fourth-wave'. ^{vi} Dr. Tam warned that, if immunization rates do not improve amongst younger populations (who are statistically lagging behind older individuals), a fourth-wave of COVID-19 infections could start to overwhelm our hospitals as we enter the fall. In British Columbia, COVID-19 infections are on the rise most acutely in the Interior Health Authority (IHA) as well as amongst people ages 20-40 years of age where the largest number/groups of people remain unvaccinated or partially vaccinated.^{vii} To mitigate this, the province of BC has reduced the number of weeks between first and second doses of COVID-19 vaccines for those in the IHA (down to six-eight weeks), reinstated a mask mandate for IHA hot spots, and provided easier opportunities to access vaccines such as with walk-in clinic options and mobile vaccination services.

Experts overwhelmingly agree that a potential fourth-wave will not be the same as previous waves due to Canada's overall extremely high vaccination rate. Instead, COVID-19 is likely to develop in clusters amongst unvaccinated populations. These clusters will continue to place stress on the health care workforce, including nurses who have already been pushed to the brink of exhaustion through the first three waves of COVID-19, and have the potential to overwhelm local health systems.

Nurses' position as most trusted health care provider affords us the responsibility of ensuring that unvaccinated and/or partially vaccinated populations not only understand the necessity of receiving a COVID-19 vaccine but are also fully apprised of the scientific imperative of receiving *both* doses of either an AstraZeneca, Moderna or Pfizer vaccine. NNPBC has recently written the following pieces that speak to the



importance of vaccinations from the perspective of a health care providers as well from the point of view of nurses assisting patients/clients in making informed choices:

- [Tackling Vaccine Hesitancy: A Nursing Approach](#)
- [Tackling Vaccine Hesitancy: Infographic](#)
- [Mandatory COVID-19 vaccines for health care workers](#)

While it remains to be seen whether a fourth-wave of COVID-19 will materialize across Canada, the increasing numbers of cases amongst those who are unvaccinated or partially vaccinated underscores the importance of continuing to utilize scientific evidence and nursing knowledge to foster immunization uptake.

Key Messages

- COVID-19 has been measured in 'waves' across Canada, with the most recent third-wave occurring in the spring of 2021.
- While Canada has an extremely high vaccination rate, there are still individuals who are refusing COVID-19 vaccines.
- The fast-spreading Delta variant is posing a concern as it is highly transmissible.
- This concern over a fourth-wave is so acute, that it prompted Canada's medical health officer, Dr. Theresa Tam, to issue a warning over a Delta variant driven fourth-wave.
- An increase in COVID-19 numbers in BC has been fueled by unvaccinated/partially vaccinated individuals largely in the Interior Health Authority and in younger age groups (20-40).
- The province of BC has generated strategies to help increase uptake and reduce transmission in hot-spot areas.
- While a fourth-wave is concerning, Canada's exceptionally high vaccination rate, is likely to mean that this fourth-wave is less all-encompassing than previous waves, mostly impacting clusters of unvaccinated individuals as opposed to the community writ large.
- NNPBC supports ongoing public health measures/recommendations implemented to stop the spread of COVID-19, including frequent hand-washing, mask-wearing in public, isolating when ill and caution when socializing etc., and anticipates that these will continue to be recommended for the foreseeable future.
- Nurses are arbiters of truth and have both the scientific knowledge and public trust to drive immunization uptake with facts and evidence.
- NNPBC is concerned that a fourth-wave will push an already stretched-thin nursing workforce beyond its limits, making immunization campaigns to those who are resistant or hesitant all the more important.

Further Reading/Resources

- [BC CDC COVID-19 Information](#)
- [WHO- COVID-19 Information](#)
- [Public Health Agency of Canada- COVID-19 Information](#)
- [Government of BC- COVID-19 Information](#)
- [Canadian Nurses association – COVID-19 Information](#)
- [NNPBC COVID-19 Resources](#)



ⁱ [Government of Canada, Health Info Base.](#)

ⁱⁱ [Government of BC, July 30, COVID-19 pandemic update.](#)

ⁱⁱⁱ [Public Health Agency of Canada. SARS-CoV-2 variants: National definitions, classifications, and public health actions.](#)

^{iv} Global BC. [COVID-19 Delta variant now dominant strain worldwide, U.S. officials say.](#)

^v The Washington Post. ['The war has changed': Internal CDC document urges new messaging, warns delta infections likely more severe.'](#)

^{vi} Global BC. [Canada's Delta-driven 4th wave of COVID-19 will be 'different' amid vaccinations: experts](#)

^{vii} [BCCDC COVID-19 Data Summary, July 26, 2021.](#)