Ministry of Health

Extension of the Second Dose Interval

March 19, 2021

Based on emerging evidence about the robust protection provided by the first dose of the COVID-19 vaccines currently authorized in Canada, the National Advisory Committee on Immunization (NACI) has strongly recommended that in the context of the current limited COVID-19 vaccine supply, jurisdictions should maximize the number of individuals benefiting from the protection provided by vaccines by extending the timeline for the second dose of vaccine up to four months after the first dose.

Ontario has accepted and started following NACI's recommendations on March 10th, 2021 with some limited exceptions. This document outlines the rationale for the adoption of NACI's recommendation for most groups and explains the rationale for small numbers of exceptions.

More People Protected

Extending the interval between doses for up to four months will allow Ontario to rapidly accelerate its vaccine rollout and maximize the number of people receiving a first dose. Evidence suggests this will result in a reduction in infections, symptomatic disease, hospitalization, and ICU admissions. This means a lot less illness and a lot of lives saved.

By extending the dose interval, for every 1000 individuals that would have received a second dose this spring (providing marginal enhancement in their protection from severe illness) there are 1000 individuals whose protection will now rise from 0% to upwards of 70%.

This approach maximizes the number of people protected in the shortest possible time. More people protected moves us closer to healthier communities where we can spend time with our loved ones and open our businesses. Based on the expected supply of mRNA vaccines, an extended interval would allow Canada to provide a first dose of vaccine to 80% of all Canadians 16 years of age and over by the end of June (NACI).

One Dose Provides Good Protection

The first dose of the COVID-19 vaccines available in Ontario provide substantial protection within 2-3 weeks of vaccination from symptomatic disease and severe COVID-19 illness and death. Most provinces have also adopted NACI's recommendation to extend the dose interval. NACI considered several factors when making their recommendation, including:

- Review of recent scientific studies of efficacy and effectiveness of COVID-19 vaccines
- Real world effectiveness demonstrating a sustained high level of protection after the first dose of vaccine
- Immunological principles and vaccine science
- Modelling data from the Public Health Agency of Canada that examined different strategies to prevent the greatest numbers of symptomatic disease, hospitalizations and deaths

Data from both clinical trials and real-world effectiveness data have shown that individuals receive very good protection from one dose of vaccine. Data from an AstraZeneca clinical trial indicated that delaying the second dose by at least 12 weeks resulted in a higher efficacy against symptomatic disease than when there was a shorter interval between doses (NACI). Experience with other multi-dose vaccines have shown that delays between doses do not result in a reduction in protection or a reduction in the durability of the immune response.

Plan to Protect High Risk Individuals

There are specific populations who are at very high risk and live in congregate settings with other vulnerable high-risk adults who need the additional increase in protection by receiving the second dose faster. These groups may also live in communities that are incredibly challenging to reach. Their situations carry such a high risk that those marginal gains count.

Residents of long-term care homes, retirement homes, Elder Care Lodges and Assisted Living facilities as well as remote and isolated First Nations communities will continue to receive a second dose using the previously recommended interval.

The province's Vaccine Clinical Advisory Group is currently examining the available evidence for individuals whose ability to develop an effective an immune response to a COVID-19 vaccine may be compromised due to their medical condition and recommendations on dose intervals for these specific population groups are forthcoming.

Plan to Monitor & Evaluate

There are plans in place to ensure that extension of the second dose interval continues to be the right choice and the one that will have the greatest impact on the population's protection from COVID-19. The vaccine effectiveness of the first dose will be monitored closely and the decision to delay the second dose will be continuously assessed based on surveillance and effectiveness data and post-implementation study designs. Effectiveness against variants of concern will also be monitored closely. Canada has secured enough vaccines to ensure that a second dose will be available to every adult who wishes to be vaccinated, to ensure completion of the vaccine series.