

## Vaccination Key Messages

- The evidence about the Omicron variant is still evolving. However, we know this variant is more transmissible than previous variants.
- The number of people who have become infected with Omicron is increasing rapidly. Reinfection is more common than with other variants and two doses of vaccine are unlikely to protect against Omicron infection.
- While the scientific learning is still evolving, illness appears to be less severe from the Omicron variant. Data from multiple countries including England, Scotland, South Africa, United States and Ontario suggest the risk of Omicron hospitalization and/or death is lower than for Delta.
- While severity of illness from Omicron among unimmunized and/or previously uninfected individuals remains uncertain, including among the elderly, it is clear that vaccination does reduce the risk of hospitalization.
- Vaccination remains the best defence against COVID-19, including the Omicron variant.
- High rates of vaccination, including booster doses, can also help preserve hospital capacity —despite being less severe relative to Delta, Omicron is causing significant burden on the health care system.
- Boosters provide better protection against the Omicron variant. For example:
  - A study from England showed a third dose was 88% effective at preventing hospitalization following infection with Omicron.
  - Another study from the United Kingdom (UK) in those 65 years of age and over showed a booster was 94% effective against hospitalization within two to nine weeks and 89% effective at 10 or more weeks.
- Overall, the available evidence shows that vaccine effectiveness against symptomatic infection and infection due to the Omicron variant wanes over time following a second dose.
- Many studies estimate little to no protective effect six months after second dose; emerging data from the UK suggest that effectiveness against symptomatic infection is restored to 50% to 70% in the first three months following a third dose.
- Data from the United States and the UK demonstrate that vaccine effectiveness against hospitalization also wanes over time from second dose and a third dose is shown to restore that protection to about 90%.
- Even for people infected with COVID-19, a third dose offers increased protection and can be administered in Ontario as soon as symptoms have resolved and the isolation period is over, with the optimal time being at least 30 days after infection.

- Pfizer and Moderna are both mRNA vaccines. Since they use the same technology, they can be safely mixed and will provide a strong immune response that protects against severe illness.
- Some evidence already suggests Moderna produces somewhat higher antibody levels compared to Pfizer. Vaccination and boosters with Moderna may also provide longer-lasting protection against infection and severe illness, particularly in older individuals.