

COVID-19 update (1Feb2022)

Infectiousness:

Evidence continues to support that Omicron is **far more transmissible** than the variants that preceded it. We are continuing to monitor the **emergence of the BA.2 subvariant**, which early research shows to be **significantly more transmissible than the original BA.1 variant** of Omicron, but this variant does not appear to be associated with more severe illness. There has been some early data from Denmark indicating that individuals recently infected with BA.1 may still be susceptible to reinfection with BA.2 – this could become an important factor in driving community infection rates if the BA.2 becomes predominant in Canada.

Severity:

Omicron has been associated with a **significantly lower rate of hospitalization** (50-70%) and death compared to Delta. Despite the association with reduced severity, the markedly increased case counts, along with a substantial portion of the population that remain unvaccinated (or whose immunity from their initial vaccination has waned) has resulted in **significant pressures on hospitals and the health care system** in general.

Vaccine effectiveness:

Evidence to date demonstrates that **for Omicron, vaccine effectiveness against hospitalization and severe outcomes is ~45-70% with two vaccine doses, and rises to ~90% with a booster dose**. Studies have shown that the more time that has elapsed since the second vaccine dose, the lower the degree of protection afforded. It is **critically important that a booster dose be received** to restore optimal protection against severe outcomes from COVID-19 infection.

Availability of new treatments:

Recently approved treatments are anticipated to significantly impact the pressures on the health care system going forward. These include **Paxlovid** (an oral medication with a 5 day course) and **Sotrovimab** (an IV infusion given as a single dose), both of which are associated with a **marked (~85-90%) reduction in the risk of hospitalization** when administered in a timely manner. These treatments are currently being **used for individuals at high risk of severe outcomes** (e.g. elderly, immunocompromised, etc – varies somewhat by province), and **supply is constrained** at this time. Another challenge is that in the context of **limited testing availability**, it can be difficult to confirm the presence of infection (as required) prior to considering treatment. Ontario has recently begun opening a series of COVID-19 assessment and treatment centres which may help to streamline this process for individuals who may qualify for treatment. Note that these treatments are not a replacement for vaccination!

School age children:

Reopening of the schools has been associated (as expected) with a **high rate of illness-related absences among students and teachers**. As in adults, Omicron is much more transmissible in children, but does not appear to result in more severe illness (on average – note that because of the vast increase in the number of infections, the number of hospitalized children has increased, even though the rate of hospitalization is lower than observed with Delta). The

mRNA vaccines have been shown to provide an extremely high level of protection for eligible children. There have not been any additional developments regarding booster doses for children yet.

What to anticipate over the coming months:

In the context of high **levels of population immunity** (as a result of vaccination and recent infection), and increasing recognition of the **potential harms of prolonged public health restrictions, anticipate a ramping down of public health measures in the coming weeks to months**. The pace of these changes will likely vary between jurisdictions, and could be affected by **potential unknowns (such as the impact of the BA.2 variant, a rebound in case counts associated with gradual reopening, or the emergence of a new variant with even higher levels of infectiousness, immune evasion, or severity)**. Please also see the most recent projections released by the Ontario Science Table on 1Feb2022 ([link](#)).

Recommendations for the workplace:

- Emphasize the importance of getting **vaccinated** and **boosted**
- Continue to require **high quality masks** in any indoor spaces where there are other people
- **Stay home when symptomatic**, get **tested** if possible, and **isolate** in accordance with applicable public health requirements
- **Avoid large social gatherings or crowded indoor spaces**