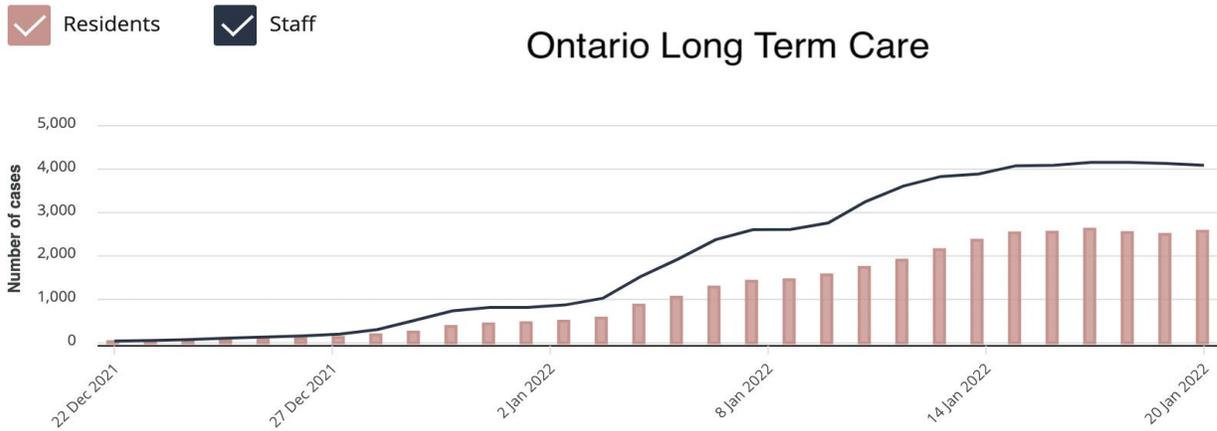
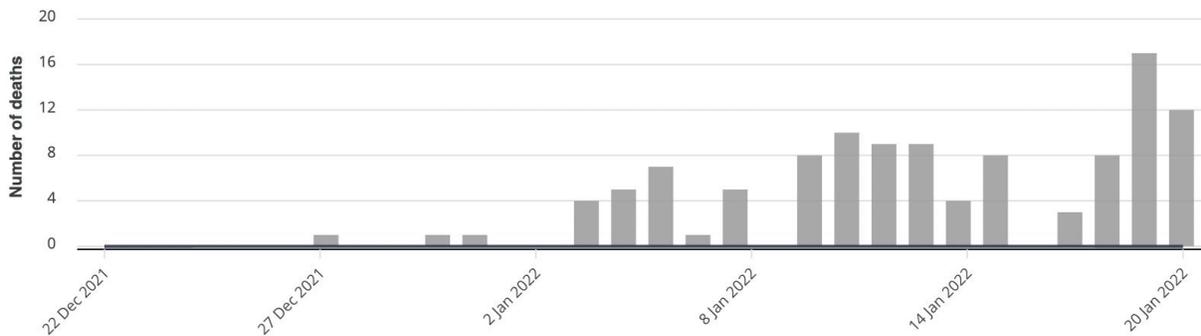


Covid-Omicron Report



Ontario total case counts for Covid-19 are now 984,359, destined to reach 1M by the end of the months. With limits to testing, the growth in the community is greater. Long term care provides a more accurate picture because of the regular testing of staff and residents. Directive #3 requires all individuals to be actively screened for symptoms and exposure history for Covid. This includes all staff, students, volunteers, and essential visitors. Like data from other countries and the wastewater signal, there is evidence that wide community spread of the variant is levelling out.



Since the beginning of the month, and through this Omicron wave, about 130 Ontario LTC deaths are attributed to Covid. These deaths may not be at variance with expected deaths for the month of January. Many residents have limited left expectancy and may die with Covid rather and because of Covid. “Deaths are included whether or not COVID-19 was determined to be a contributing or underlying cause of death”.

[How Ontario is Responding, Jan 21](#)

The Covid-19 Guidance for LTC and retirement homes, January 18, is attached to this report. Updates on admissions, transfers, outbreak definitions, test to work and outbreak definitions and described in detail. Many ask wheter the current outbreaks in LTC homes are significantly different than past outbreaks of influenza and other respiratory viruses that occur in the winter months, and whether restrictions, causing isolation and confinement syndrome should be less.



OLTCC invited Dr. Allison McGeer to speak with LTC clinicians and last evening's webinar. Dr. McGeer is a Professor in Laboratory Medicine and Pathobiology and the Dalla Lana School of Public Health at the University of Toronto, and an infectious disease physician at Sinai Health System. Her research interests are in the prevention of healthcare-associated infection, the epidemiology emerging infections, and adult immunization. She presented the latest information on the highly transmissible Omicron variant, which represented 98% of Covid isolates by the end of December.

The recording of this informative, interactive session will be available at the OLTCC website, oltcc.ca, under the Education tab.

In addition to providing third, and now fourth, doses of vaccine, several other favourable factors assure LTC to be better prepared for the with current wave. Clinicians are better aware of early treatments and interventions. Infection prevention and control (IPAC) is improved. Isolation beds and cohorting limits the spread of the virus within facilities. The 3 and 4-bed rooms are eliminated. Ventilation systems are improved.

Both mRNA vaccines elicited strong protection against Covid-19–related hospitalization and death. Evidence from Qatar, which has a highly vaccinated, largely expatriate community, shows vaccination with Moderna (mRNA-1273) was associated with a lower incidence of Covid breakthrough infection than vaccination with Pfizer (BNT162b2). This finding is consistent with the differences in neutralizing antibody titers. Both vaccines also had remarkably similar patterns of buildup of protection, starting from the first dose and then waning a few months after the second dose. The nature of vaccine immunity that builds after vaccination and wanes over time appeared to be similar with both vaccines.

192,123 persons who had received two doses of Moderna were matched with same number who received two doses of Pfizer vaccine. Among the Moderna-vaccinated persons, 878 breakthrough infections were recorded. Of these infections, 3 progressed to severe Covid-19 (acute-care hospitalization), but none progressed to critical disease (hospitalization in an intensive care unit) or death. Among Pfizer-vaccinated persons, there were 1262 breakthrough infections. Of these infections, 7 progressed to severe Covid-19, none to critical disease, and 1 to death.



Breakthroughs occur with a longer interval since the time of vaccination. At approximately 90 days after the second dose both incidence curves started to bend upward which suggested progressive waning of vaccine protection.

[Effectiveness of mRNA-1273 and BNT162b2 Vaccines, NEJM, Jan 19](#)

Fourth dose controversy - The leading evidence for fourth doses comes from The Sheba Medical Center, in Israel. Israel pioneered the use of booster shots and is among the first to recommend fourth for high-risk groups. The study of 154 hospital workers examined safety and antibody response. Now a month after this landmark study, the fourth dose may not be as effective against the Omicron variant. Professor Gili Regev-Yochay is a lead researcher in the study. “We see an increase in antibodies, higher than after the third dose. However, we see many infected with Omicron who received the fourth dose. Granted, a bit less than in the control group, but still a lot of infections.”

[4th dose ‘not good enough’ against Omicron, Times of Israel, Jan 21](#)