

COVID-19 Update

	Ont. cases	Deaths	LTC cases	LTC deaths	% LTC deaths
September 15	40,383	2,872	3,274	1,854	64.6%
January 27	262,463	6,014	14,264	3,518	58.5%
February 4	253,170	6,438	14,702	3,697	57.4%
Sep 15 – Feb 4 (2 nd wave)	212,787	3,566	11,428	1,843	51.7%

The number of homes in outbreak this week is down to 208, with over half (53%) without any resident cases. LTC deaths represent half of the overall provincial mortality in the second wave.

<https://www.ontario.ca/page/how-ontario-is-responding-covid-19#section-0>

Dr. Barry Roth is Medical Director of Woodington Lodge in Tilsonburg. This week he was nominated by his staff as Hometown Hero, on Global News, because of his dedication to his family practice and his duties at three long-term care homes during the pandemic. His team remained “positive through the confidence in what we were doing.”

[Global New, Feb 2](#)



Dr. Roth describes the effective teamwork with the Administrator, Director of Care, nurse practitioner, and others. Woodington Lodge is one of three facilities operated by Oxford County. The others are in Ingersoll and Woodstock. Dr. Roth commended the leadership and support the county CAO and council. An article by Dr. Nathan Stall (CMAJ, Aug 17) related ownership with outbreaks. Municipal homes had the lowest incidence of outbreaks. The cumulative incidence of COVID outbreaks in municipal homes was 23.4 per thousand compared to 85.1 per thousand among for-profit homes, 61.4 per thousand among other non-profit homes.

<https://www.cmaj.ca/content/192/33/E946>

The experience of municipal homes demonstrates the value of oversight and accountability in the LTC sector. OLTCC, along with the OMA Section for LTC/COE, recommends the creation of a Chief Medical Officer for LTC, desirably in each of the five Ontario Health regions. This recommendation was made to the LTC Commission by the OLTCC delegation. “A Chief Medical Officer (CMO) of Long Term Care will demonstrate real and tangible action to provide oversight and leadership to the sector. This will be particularly useful in outbreak identification, coordination, advice, guidance.”

[Transcript OLTCC - LTC Commission, Sep 30, 2020](#)

THE VACCINES - There is a delay in the vaccination plan but LTC residents should receive their second dose in the next couple of weeks. Canada has contracted one the greatest per capita orders. Here is summary of what we have and what we may be getting:

1. **Moderna** is an RNA (ribonucleic acid) vaccine. mRNA carries genetic information of a virus. Part of the code from the SARS-CoV-2 virus trains the immune system to recognize the virus and mount an immune response against it. The vaccine is frozen between -15C and -25C, can be kept in a refrigerator between 2C and 8C for up to 30 days. In trials the dose was given 28 days apart and prevented serious illness from COVID-19 in 94% of patients. Canada purchased 40 million doses and expects all 40 million doses to be delivered by the fall.
2. **Pfizer-BioNTech** is also an mRNA vaccine. BioNTech developed the technology and partnered with Pfizer for further research, manufacturing and commercialization. The vaccine must be kept at ultra-low temperatures, between -60C and -80C, and can be thawed to room temperature up to five days before use. In trial the two doses were given 21 days apart and prevented serious illness in 95% of patients. Canada gets 20 million guaranteed doses with an option for 56 million more. Pfizer is to deliver four million doses by March 31 and most of the rest by Sept. 30.
3. **Johnson and Johnson** is a viral vectored vaccine, which adapts an adenovirus that carries a piece of the SARS-CoV-2 virus. The vaccine can be stored up to two years at -20C, and in a refrigerator between 2C and 8C for three months. Current use is a single dose and was 66% effective against moderate and severe illness, 85% effective at preventing severe illness. Canada purchased 10 million guaranteed doses and awaits review by Health Canada.
4. **AstraZeneca** is a viral vector vaccine, similar to Johnson and Johnson's, however the adenovirus used by AstraZeneca normally infects chimpanzees. Refrigeration at 2 C to 8 C, for both shipping and storage. The two doses are 28 days apart shown to be 70% effective at preventing serious illness. Canada purchased 20 million doses. Health Canada review is in the final stages with a decision expected within the next two weeks.
5. **Novavax** uses a protein subunit vaccine from the SARS-CoV-2 virus to provoke an immune response. Two doses are given 21 days apart. A Phase 3 trial in the United Kingdom showed 89% effectiveness against COVID-19 infections. Canada purchased 52 million guaranteed, plus an option to buy another 20 million. Novavax submitted an application to Health Canada on Jan. 29, 2021. The review has begun but it will likely be at least a month before Novavax has all the safety data it needs to file.
6. **Sanofi-GlaxoSmithKline** is an adjuvanted recombinant protein-based vaccine, similar to the flu vaccines. A protein from the SARS-CoV-2 virus to invokes an immune. Results in older adults were disappointing and Sanofi is retooling the vaccine. Another study will launch this month. Canada purchased 52 million plus an option for 20 million more.
7. **Medicago** has headquarters in Quebec City. Its recombinant vaccine is still in a Phase 2 trial. Phase 3 trial could begin this spring, with approval likely considered in the fall if the trial shows success.