

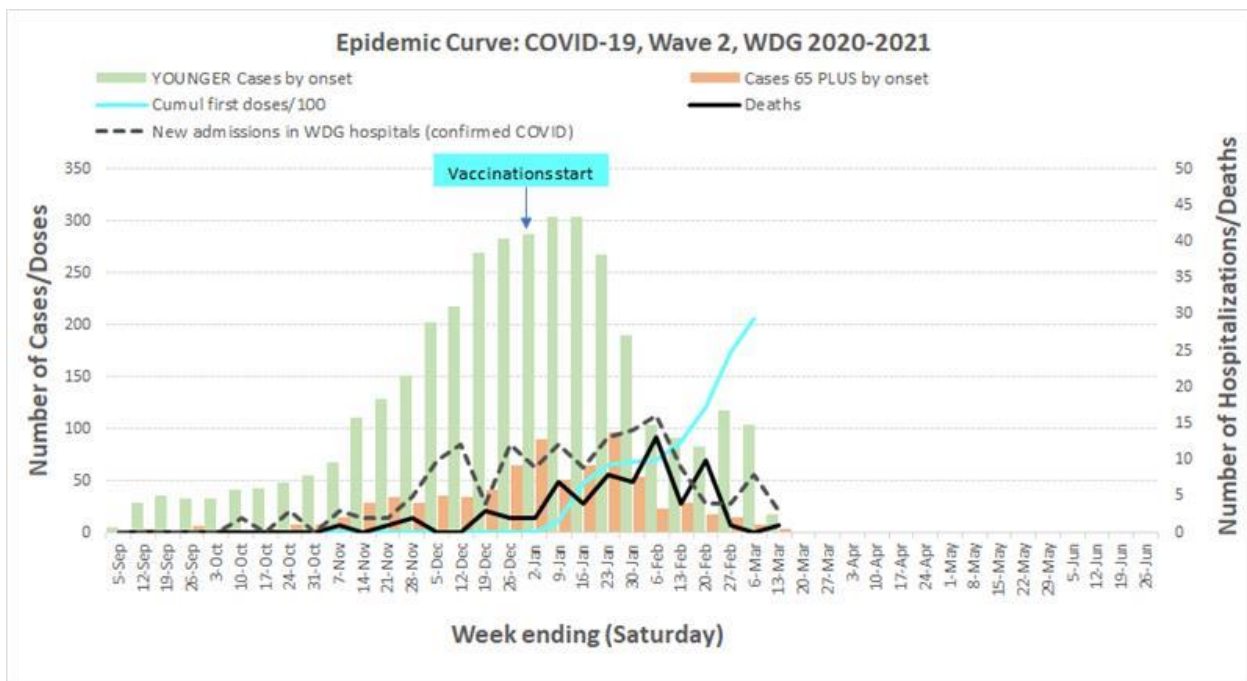
COVID-19 Vaccine Bulletin #15 Vaccine Dosage & Variants of Concern

The purpose of the Vaccine Bulletin is to give you the latest information about COVID-19 vaccines. For this bulletin, the focus will be on vaccine dosage questions and variants of concern.

Quick Updates

- Check out [Wellington-Dufferin-Guelph's vaccination dashboard](#). The **total number of vaccines** that have been given in Wellington-Dufferin-Guelph is **34,938**.
- **77%** of people in Wellington, Dufferin and Guelph who are 80 years of age and older have received at least one dose of vaccine.
- Vaccine pre-registration eligibility has been expanded to include individuals who are part of Phase 2 including those aged 60-79, those with specific health conditions, and essential workers who cannot work from home. See www.wdgppublichealth.ca/register for more information. There is a **Vaccine Registration and Booking Helpline: 1-844-780-0202** for anyone who has issues pre-registering or booking online.
- There are five mass clinic sites operating in WDG and some primary care offices in WDG are offering AstraZeneca vaccine to clients aged 60-64 as part of a pilot

Vaccination Rate & Epidemic Curve in Wellington-Dufferin-Guelph



Updated – NACI Recommendations for Use of COVID-19 Vaccines

- The [recommendations from the National Advisory Committee on Immunization \(NACI\)](#) on the use of the AstraZeneca COVID-19 vaccine has been updated to **include individuals who are 65 years of age and older**. This update is based on results of studies of vaccine effectiveness from the United Kingdom.

Vaccine Dosage Questions

How effective is a single dose of a COVID-19 vaccine?

Pfizer	Moderna	AstraZeneca
From clinical trials: <ul style="list-style-type: none"> 92% efficacy at preventing symptomatic COVID-19 >14 days after Dose 1 From real world data: <ul style="list-style-type: none"> 94% effective at preventing COVID-19 related hospitalizations (28-34 days after Dose 1) 	From clinical trials: <ul style="list-style-type: none"> 92% efficacy at preventing symptomatic COVID-19 ≥ 14 days after Dose 1 	From clinical trials: <ul style="list-style-type: none"> 71% efficacy (≥ 22 days after Dose 1) From real world data: <ul style="list-style-type: none"> 85% effective at preventing COVID-19 related hospitalizations (28-34 days after Dose 1)

Why are second doses being delayed for up to 16 weeks?

- In the context of limited vaccine supply and the ongoing pandemic, delaying second doses maximizes the number of people who benefit from a single dose of vaccine.
- As the table above indicates, current evidence demonstrates that a single dose of a COVID-19 vaccine provides good protection against symptomatic COVID-19.
- Data on other multi-dose vaccine products show that a greater than recommended interval between doses does not typically result in a reduction in final antibody concentrations. Also, the greatest proportion of short-term protection is achieved with the first dose with additional doses primarily intended to extend protection over the long term.

References

National Advisory Committee on Immunization. [Recommendations on the use of COVID-19 vaccines.](#)

Vasileiou, E. et al. (2021). Effectiveness of first dose of COVID-19 vaccines against hospital admissions in Scotland: National prospective cohort study of 5.4 million people. Pre-print: https://www.ed.ac.uk/files/atoms/files/scotland_firstvaccinedata_preprint.pdf.

Variants of Concern & Vaccine Effectiveness

Local Prevalence of VOCs

- As reported by [Public Health Ontario](#), **39%** of the COVID-19 cases in Wellington, Dufferin and Guelph are variants of concern (VOCs) which is the same as the provincial average (data from March 5-11). Both local and provincial numbers have been growing.
- The vast majority (93%) of the VOCs in Ontario (and 100% in WDG) that have been genome sequenced are the **B.1.1.7 variant** (originated in the United Kingdom). For more information on the different types of VOCs review [Vaccine Bulletin #9](#).

Vaccine Effectiveness

B.1.1.7 (originated in UK)	Most recent data suggest that the efficacy of current vaccines (Pfizer, Moderna and AstraZeneca) would not be significantly impacted.
B.1.351 (originated in South Africa)	There is some evidence to suggest that current vaccines (Pfizer, Moderna & AstraZeneca) may be less effective against this variant. Moderna has announced plans to evaluate a new vaccine that incorporates B.1.351 mutations. Pfizer has also stated that it is possible to update their vaccine with a new variant sequence, if needed.
P.1 (originated in Brazil)	There is some evidence that the mRNA vaccines (Pfizer and Moderna) may be less effective against this variant.

References

- Emary, K.R.W. et al. (2021). Efficacy of ChAdOx1 nCoV-19 (AZD1222) Vaccine against SARS-CoV-2 VOC 212012/01 (B.1.1.7). Pre-print available at SSRN: <https://ssrn.com/abstract=3779160>.
- Madhi, S. A. et al. (2021). Efficacy of the ChAdOx1 nCoV-19 Vaccine against the B.1.351 variant. New England Journal of Medicine. DOI: [10.1056/NEJMoa2102214](https://doi.org/10.1056/NEJMoa2102214).
- Public Health Ontario. [COVID-19 B.1.1.7 \(501Y.V1\) Variant of Concern – What We Know So Far](#).
- Public Health Ontario. [COVID-19 B.1.351 \(501Y.V2\) Variant of Concern – What We Know So Far](#).
- Public Health Ontario. [COVID-19 P.1 Variant of Concern – What We Know So Far](#).

COVID-19 Vaccine Multi-Language Information

- The Government of Ontario has a website with vaccine resources available in multiple languages: www.ontario.ca/page/covid-19-communication-resources.
- [Immigrant Services of Guelph-Wellington](#) is providing a series of information sessions on COVID-19 vaccinations in multiple languages. See their [flyer for details](#) (links available in the flyer to sign up for workshops).

Status of Doses Administered in Ontario

[COVID-19 Vaccine Uptake in Ontario: December 14, 2020 to March 13, 2021](#)

Reliable Sources of Information on Vaccines

[Public Health Agency of Canada](#)

[Government of Ontario](#)

[Public Health Ontario](#)

[Centre for Effective Practice \(CEP\)](#)

[World Health Organization](#)

[COVID-19 Studies from the World Health Organization Database](#)

[Centres for Disease Control and Prevention \(CDC\)](#)