

# Decreasing Prevalence of COVID-19 Cases in Toronto\*

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The coronavirus disease, better known as COVID-19, is an infectious disease that first emerged in 2019, soon resulting in a global pandemic half a year later. This study aims to investigate the trends in COVID-19 cases in the City of Toronto from 2020 to 2023, as well as the severity of each of these cases. Based on the exploration of the number of reported cases, the number of cases who were hospitalized and the number of cases who were sent to the ICU, there is strong evidence support the hypothesis that the coronavirus disease is no longer a major threat to society as it was during the peak of the pandemic. The results of this study is significant, as it impacts the future directions of COVID-19 regulations for businesses, schools and governmental institutions.

## 1 Introduction

The coronavirus disease, also commonly referred to as COVID-19, is a contagious disease which first emerged in late 2019 (Public Health Ontario 2024). Due to the scale of the coronavirus outbreak and its rapid international transmission rate, the World's Health Organization (WHO) characterized it to be a global pandemic and a public health emergency of international concern (PHEIC) on March 11th 2020 (World Health Organization 2020). This statement urged national leaders to begin formulating a response plan, including but not limited to masking restrictions, mandatory vaccination policies and quarantines to limit the spread of the virus. However, in early 2022, despite the ongoing PHEIC, the province of Ontario announced they would lift all COVID-19 related by the end of April 2022 (Fox 2022).

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\*Code and data supporting this analysis are available at: [https://github.com/DeniseChang9/Covid-19\\_Cases.git](https://github.com/DeniseChang9/Covid-19_Cases.git)

## 2 Data

## 3 Results

## 4 Discussion

## 5 Conclusion

## References

- Fox, Chris. 2022. *This Is When Ontario Will Lift Its Remaining COVID-19 Restrictions*. CTV News Toronto. [https://toronto.ctvnews.ca/this-is-when-ontario-will-lift-its-remaining-covid-19-restrictions-1.5812199?\\_\\_vfz=medium](https://toronto.ctvnews.ca/this-is-when-ontario-will-lift-its-remaining-covid-19-restrictions-1.5812199?__vfz=medium).
- Public Health Ontario. 2024. *Coronavirus Disease 2019 (COVID-19)*. R Foundation for Statistical Computing. <https://www.publichealthontario.ca/diseases-and-conditions/infectious-diseases/respiratory-diseases/novel-coronavirus>.
- World Health Organization. 2020. *WHO Director-General's Opening Remarks at the Media Briefing on COVID-19 - 11 March 2020*. World Health Organization. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.