

# COVID-19 Toronto Report

## Systematic Issues of COVID-19 in Toronto

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## 1. Introduction

The year 2020 would be marked in history book by the emergence of COVID-19 (Novel Coronavirus) and its impact spared no corner of the world. Half a million of people has surrendered their lives to the virus globally with more than 10 million cases infected. In Toronto - Canada's largest city - almost 15000 cases of infection were found, and more than 1000 deaths have been reported so far.

Those lost lives will never be returned, and we must strive to improve our response to next pandemic. Governments need to evaluate the spread of pandemic in their communities in order to better prepare for the next inevitable event. This report will assess the cases of infection in 140 neighborhoods in Toronto along with their respective neighborhood profiles to uncover systematic issues in the city of Toronto related thru the spread of COVID-19. Key insights and recommended measures discussed will help improve the quality of decision making to protects residents against future waves of infectious diseases.

## 2. Data Description

Open Data Toronto is an excellent source for high quality data and provided the perfect data to perform analysis in our report. Additionally, we have access to COVID-19 cases by neighborhood thanks to the transparency of City of Toronto in response to the pandemic.

All the data used in this report were listed out as follows:

**COVID-19 Toronto Neighborhood Maps** – City of Toronto has given public access to number of cases for all 140 neighborhoods. For this part, we will subset to sporadic cases as the outbreak related cases were all well understood and Canadian government has already committed to improve in that aspect.

**Neighborhood Profiles** – 2016 Census of Population documented all keys demographic information needed and is available on Open data Toronto. Given the topic of this report, Only income, occupation, ethnicities and commuting related data were included as these were the main characteristics which would best reflect the systematic issues interested.

**Neighborhoods Geospatial** – Open data Toronto provided the geojson data required to locate our neighborhoods and their boundaries. This data was last updated at June 29, 2020.

**Foursquare venues** – Foursquare API was used to explore and extract venues in each of the 140 neighborhoods. Venues data will allow the report to investigate neighborhood construct and its potential link to an infectious disease.

3. Methodology and Analysis
4. Results
5. Discussion
6. Conclusion

Reference:

City of Toronto COVID-19 Summary

<https://www.toronto.ca/home/covid-19/covid-19-latest-city-of-toronto-news/covid-19-status-of-cases-in-toronto/>

Neighborhood profiles

<https://open.toronto.ca/dataset/neighbourhood-profiles/>

Neighbourhoods

<https://open.toronto.ca/dataset/neighbourhoods/>