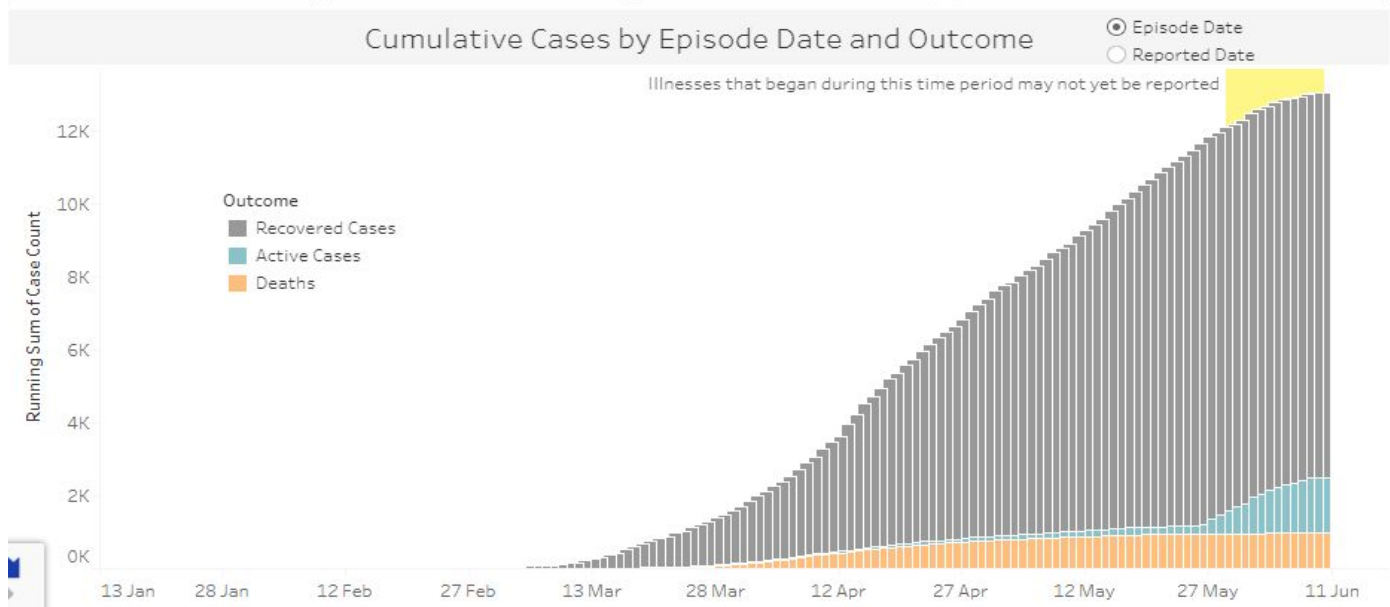


# Toronto Neighborhoods - Safe or not? (as of June 11, 2020)

By Aditya Kolluru

Cases*	Recovered Cases	Deaths	Cumulative Institutional Outbreaks +
13,063	10,558	965	155



## **Introduction:**

The COVID-19 pandemic in Canada is part of the ongoing worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Canada declared States of emergency in all its provinces. Due to this the bars, restaurants, cinemas, playgrounds, parks and other businesses and places where there are large social gatherings have been ordered closed by provinces, territories, and municipalities across the country. Initially, some jurisdictions allowed restaurants or bars to stay open with reduced capacity and social distancing.

## **Business Problem:**

With easing social restrictions of the bars, restaurants, playgrounds and other places, people are worried how safe it is to go outside. Using data science methodology and machine learning techniques like clustering, this project answers the questions like, 1. Which neighborhood would pose the least risk if someone wants to go out to a restaurant or a sports field to play in Toronto?, although it is always recommended to stay home.

## **Data:**

To solve the problem, we will need the following data

1. Covid-19 cases from all the neighborhoods in Toronto obtained from [Toronto Covid-19 data](#).
2. List of all neighborhoods and postal codes in Toronto extracted from [Toronto Postal Codes](#) Wikipedia page by web-scraping techniques.
3. Latitude and Longitude coordinates obtained by using the Python Geocoder package.
4. Venue data for those neighborhoods by using Foursquare API