

Discussion

For our project, we wanted to investigate if there was a correlation between characteristics of a neighbourhood and the people living in them such as income of families, cases of COVID-19, fatal cases.

For question 1a, I found that some neighbourhoods with a greater population (greater than the average) did have a lot more Covid-19 cases for example Woburn with a population 53 485 and 679 total cases. But there were also neighbourhoods such as Willowdale East that had a population of 50 434 and 158 cases which is significantly lower than Woburn. Based on this data **most** neighbourhoods with a population over 30000 people had a number of covid-19 cases that was over average of 205 cases.

For question 1b, I wanted to see if there was a correlation between income of families and the number of covid 19 cases in their neighbourhood. I found that (with the exception of a few outliers) that neighbourhoods with at least 10 000 households had at least 150 cases of covid-19. I also found that neighbourhoods that had more families that made 125K a year than families that made below 125K a year had significantly less (≤ 50) cases.

For question 2, I found that there are 12 neighbourhoods out of 141 with over 40 fatal cases.

For exploratory question 3, we wanted to see if the percentage of fatal cases were affected by different factors such as the source of infection or one's age. To see the impact of being elderly, we looked at if the size of the elderly population affected a neighbourhood's fatality rate, which is shown in table q3. It was found that although there may be a slight correlation, it isn't a strong one. We can see from comparing tables q3 and q3b that the 10 neighbourhoods with the highest elderly population aren't included in the neighbourhoods with the highest percentage of fatal cases. However, some of the percentage of fatal cases in table q3 were close to the top 10 percentages in q3b.

From table q4 we can see that different sources of infections definitely have a clear difference in percentage of fatal cases. The type 'outbreak associated' seemed to have the highest fatality percentage by far with 14%. Thus, from our queries, it seems that infection type has a bigger influence on the fatality.