Based on the results obtained from the survey we were interested in finding if there were any consistencies in the mask wearing habits amongst the people in the top 100 counties (case-wise) in March and September 2020. An independent t-test was conducted with a random sample of 25 counties from these two populations.

H0: There is no change in mask wearing patterns in the two populations  
HA : There is a change in the  mask wearing patterns in the two populations

The objective of this test was to check whether the mask wearing patterns influence the spread of covid-19. The statistical analysis on these two samples showed that 73% people in March and 70% people in September on average, answered as “always wearing a mask when expected to be within 6 feet of distance in public”. Similarly, 2% and 3% on average answered as “never wearing a mask when expected to be within 6 feet of distance in public” for the month of March and September, respectively.

In both cases the p-value was found to be greater than .05 which means we fail to reject the null hypothesis. In conclusion, there was not enough evidence to prove that the mask wearing patterns have changed in these two populations. As a result, it can be said that mask wearing patterns do play a role in the spread of covid based on this analysis, provided there are other potential factors that were not explored in this project.