

**September 3, 2021**

I am writing in response to your question regarding the efficacy of mask policies in public schools. Because no one collected data regarding the number of students and employees quarantined due to Covid, we surveyed the school districts and charter systems directly. This allowed us to confirm the length mask policies had been in place as well as the number of Covid positives in each group.

To obtain apples-to-apples comparisons, we collected data from schools on September 1 and asked for numbers specific to that date. While numbers can fluctuate even during a 24-hour period, we tried to make the snapshot-in-time data be as specific to the 8-hour day of Sept. 1 as possible.

We received responses from 180 school districts and charter school systems for a response rate of 70%.

To perform the analysis, we divided the school districts/charter systems into two groups based on mask policy. One group consists of those that had full mask mandates in place for at least two weeks; the other contains those with full mask policies for less than two weeks, partial mask policies or no mask policies. We used the two-week cutoff because the incubation period for Covid can be up to two weeks.

Once divided into these two groups, there were:

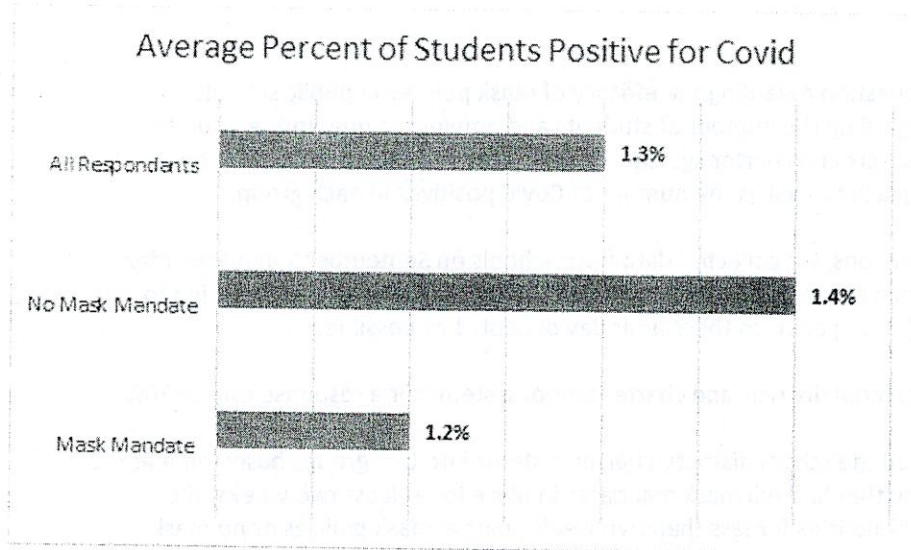
- 99 WITH NO mask policy
- 81 WITH mask policies

We then calculated for each district/charter these percentages based on the September 1 numbers:

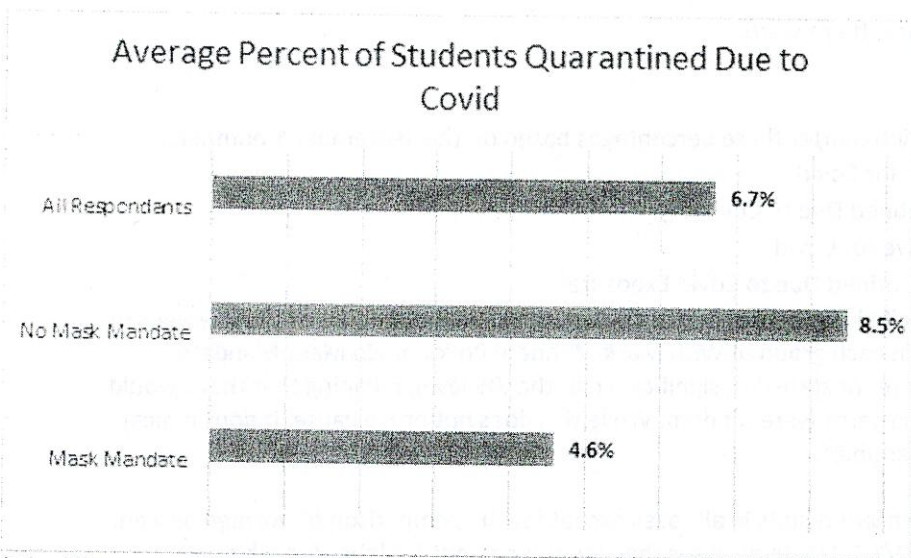
- Percent Students Positive for Covid
- Percent Students Quarantined Due to Covid Exposure
- Percent Employees Positive for Covid
- Percent Employees Quarantined Due to Covid Exposure

We then performed an analysis called comparison of the means, which basically looks at the averages of each of the above instances within each group of With Mask Mandate Policy or No Mask Mandate Policy. We also tested each of these for statistical significance at the .05 level, meaning that there would be less than 5% chance that the patterns were random. While this does not prove cause, it does indicate a relationship between the two variables.

The results show statistically significant results in all cases except for the comparison of average percent of students positive for Covid on 9/1/2021. **In all cases the average percent is higher for schools without a full mask mandate policy in place for two weeks vs. all other schools.**

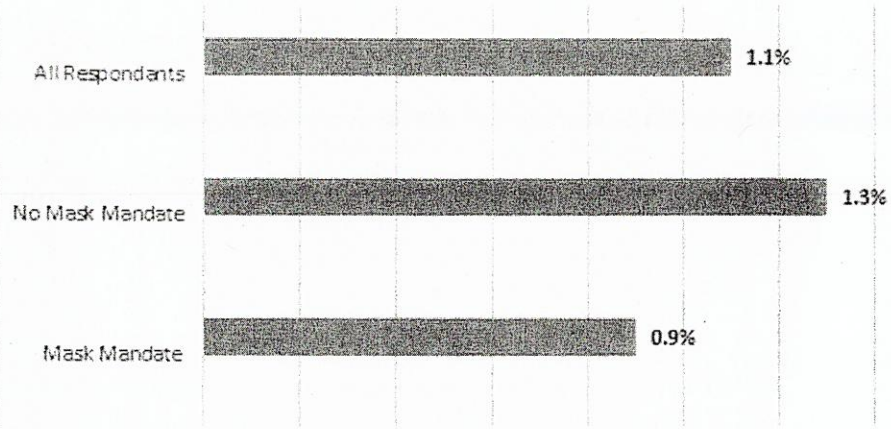


\* The difference is not statistically significant at the .05 level. All data for 9/1/2021.



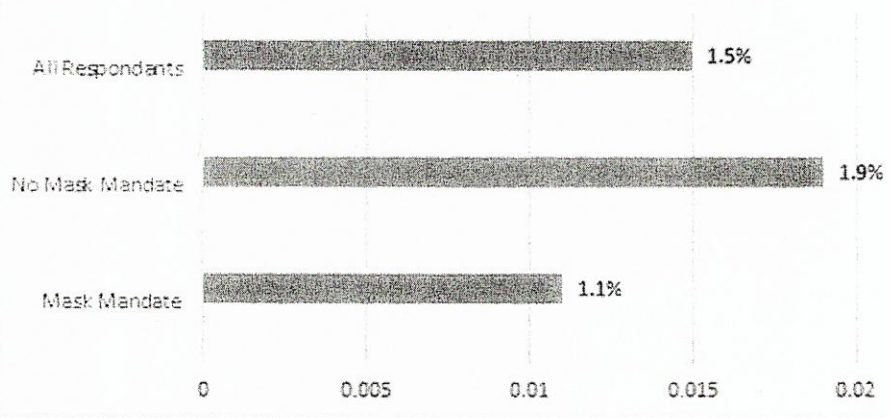
\* The difference is statistically significant at the .05 level. All data for 9/1/2021.

### Average Percent of Employees Positive for Covid



\* The difference is statistically significant at the .05 level. All data for 9/1/2021.

### Average Percent of Employees Quarantined Due to Covid



\* The difference is statistically significant at the .05 level. All data for 9/1/2021.

Please let me know if you have further questions.

Thanks!

Julie