An Observational Study of Mask Usage in St. Joseph and Elkhart Counties

Weaver, Abigail (School: Marian High School)

Background: The current COVID-19 pandemic caused by the Sars-Cov-2 virus has impacted and disrupted families all across the world. The impact of mask mandates on public compliance wearing is a very important aspect of public health and pandemic control. Hypothesis: St. Joseph County will have a higher percentage of people wearing masks, or another form of approved facial covering, than Elkhart County because the citizens will be more compliant with County recommendations and/or mandates. Methods: Customers were counted who were wearing masks in both St. Joseph and Elkhart County. 6 stores were compared and data was collected regarding race, age, and sex. Results: Mann Whitney U Test; St. Joseph County Session 1 vs Elkhart County Session 1 mask wearers; z score= 2.80224, p value= .00512. Mann Whitney U Test; Elkhart County Session 1 vs Elkhart County Session 2 non mask wearers; z score= 2.80224, p value= .00512. Mann Whitney U Test; Elkhart County Session 1 vs Elkhart County Session 2 mask wearers; z score=-1.68135, p value= .09296. Mann Whitney U Test; St. Joseph County Session 1 vs St. Joseph County Session 2 mask wearers; z score= -0.40032, p value= .68916. Discussion: The data was statistically significant when comparing St. Joseph County Session 1 to Elkhart County Session 1 while St. Joseph had a mask mandate and Elkhart County only had a simple mask suggestion. Conclusion: In conclusion, mask mandates by public health officials vs simple mask suggestions improve the public compliance with mask wearing.

Awards Won: