Challenge 7 DACSS601 Fall 23

3. Research Question:

After several years, the COVID19 virus is still causing illness and death. With the advent of new vaccines and better treatments for those with the virus, have deaths from the disease reached a stable percentage in Massachusetts?

4. Hypothesis about relationship of two variables:

If we compare confirmed cases reported with confirmed deaths reported from COVID19 over the timeline since its beginning (February 2020) we should be able to examine a ratio between deaths and cases for each week to see if this ratio has stabilized.

5. Variables to be Measured:

The MA Dept of Public Health has tracked COVID19 since February of 2020. There are many detailed data sets that provide insight into the demographics of the commonwealth’s counties, cities, towns, racial makeup and age information.

The weekly counts of cases and death will be used for this analysis. In this data set, cases and deaths have three possible values based on how they were categorized:

COVID Cases: Confirmed, Probable, and Confirmed and Probable

COVID Deaths: Confirmed, Probable, and Confirmed and Probable

For the analysis I will be using only the confirmed counts, as their DPH definitions are very specific. A person with a positive molecular test for COVID19 is the definition of a confirmed case. A COVID19 confirmed death is a person who has COVID-19 or an equivalent term listed on the death certificate. The data provided by the DPH can produce reliable follow-on analysis as the counts and dates are very specific. I believe that using the confirmed case and death data is a valid choice as the definitions of each count are well defined.