

Project

Use the available COVID19 data regarding number of cases and fatalities and perform the following tasks.

1. Estimate the temporal distribution of number of cases and fatalities in your assigned state.
2. Find the correlation between the total number of cases (by the end of Oct 2020) in counties of your assigned state, the number of students in elementary/secondary in counties, and the average income of counties. Repeat this for the total number of fatalities (by the end of Oct 2020).

Also, find the correlation between the number of daily cases and the number of daily fatalities for each county of your assigned state. Summarize the correlations in a table and visualize them.

Optional: Find the correlation between the total number of cases in counties of your assigned state and the average daily temperature of counties.

3. Consider the total number of cases in your assigned state (by the end of Oct 2020) as the total number at risk and find the survival and hazard for the state (as functions of time).

Presentations

Wed. Dec 2

We will have extended session (2 hours) to allow all groups present their work. Each group will have 10 minutes and both members of the group should participate in the presentation and be ready to answer the questions.

Report

Up to 15 pages including abstract, introduction, methods, results, and discussion along with all tables and figures.

Font and Spacing

Arial 11, Single Column, Double Space

Submission

A single zip file for each group including power point, pdf, R-script, and data

Report Deadline: Thurs, Dec 3 through Canvas