COVID-19 IN SAN ANTONIO - ABRIDGED REPORT

On Fri Jun-19, the data file received for Jun-18 required 3 days removed due to QC. This report uses data up to Jun-15. Under current conditions the total cases could surpass 100,000 by July. SA requirement to wear face-masks might reverse the trend in 2 weeks

The model presented in this report has the following traits:

- *A calibration period of one week*: This means that after a major event, it takes about one week of data to have a reliable prediction.

- *A window of predictability of two months*: This means that once the model is calibrated, the trajectories of case numbers are very unlikely to change for about eight weeks unless a major event occurs.

The major events that have defined the COVID-19 epidemic in San Antonio are:

- **Date of event**: Feb 13. **Date of observed effect**: February 18. This date was found computationally. A retrospective analysis revealed that the only reported event on February 13 was a positive test from an evacuee at JBSA-Lackland in San Antonio.

- **Date of event**: March 13: Declaration of local disaster and public health emergency by the County Judge.

- **Date of event**: May 1. **Date of observed effect**: May 6. Businesses open at 25% occupancy.

- **Date of event**: May 18: **Date of observed effect**: May 23. Businesses open at 50% occupancy.

- **Date of event**: June 3. **Date of observed effect**: June 8. Governor Abbott Announces Phase III.

IMPORTANT: 879 congregated cases were removed from analysis on 20-Jun-2020. These cases are not included in projections.

Projected Cases Under Conditions on 20-Jun-2020. $\beta_A = 1.18$, $\beta_Y = 1.17$, $K_{last} = 0.017$, $R_e = 1.43$
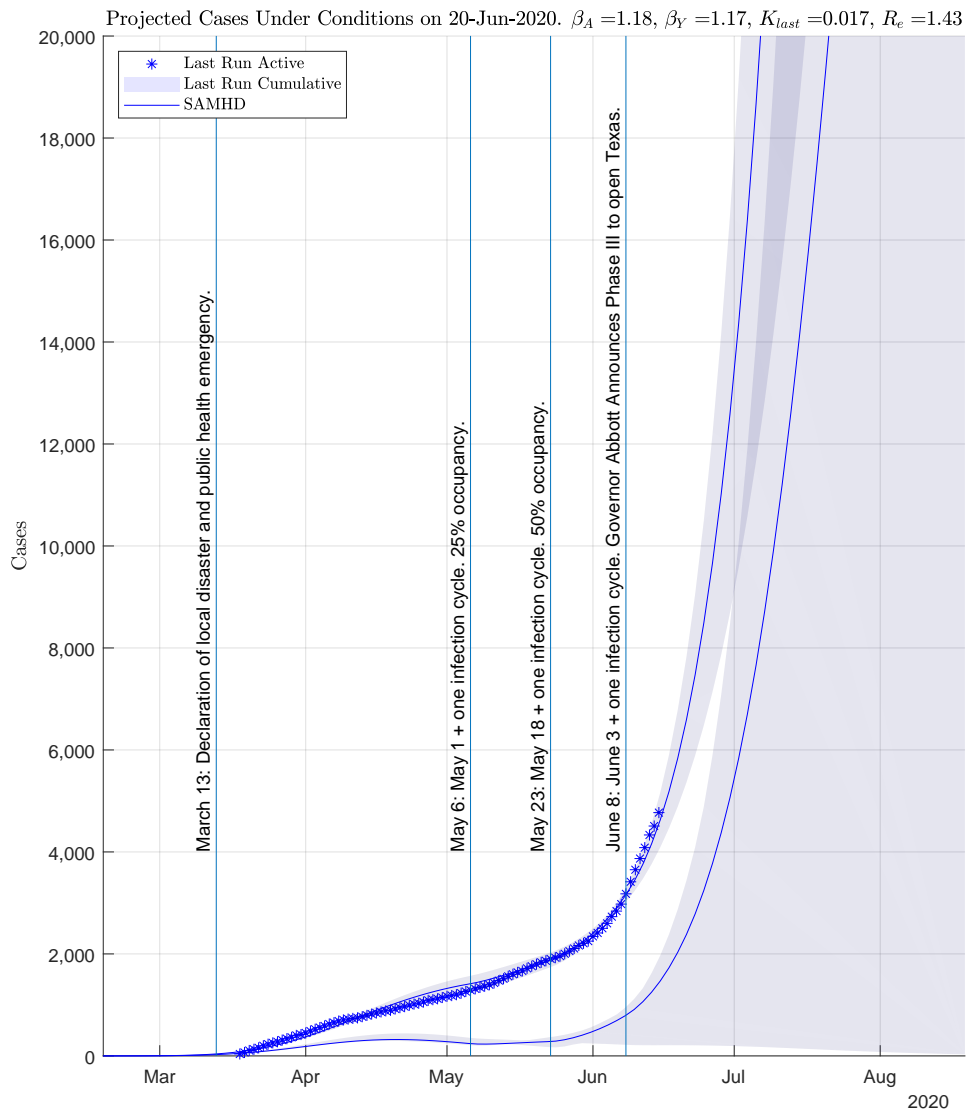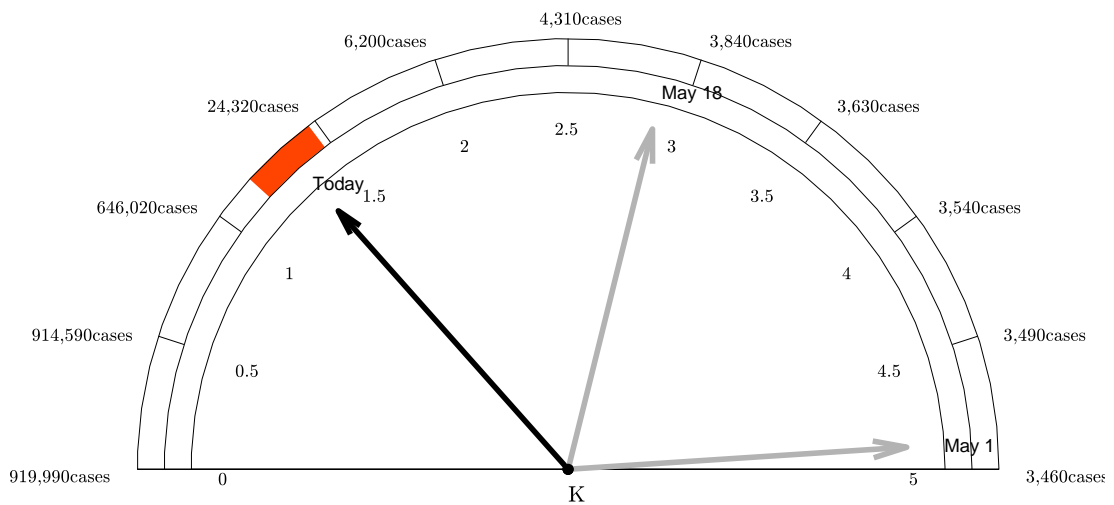
Figure 0.0-1: IMPORTANT: 879 congregated cases were removed from analysis on 20-Jun-2020. These cases are not included in projections. File: SanAntonio20-Jun-2020-EVOLUTION

Case Projection by Risk Mitigation Coefficient. $K = 1.3\%$, $R_e = 1.43$

Colored annular wedge representes confidence interval for projected number of cases. Color represents hazard.

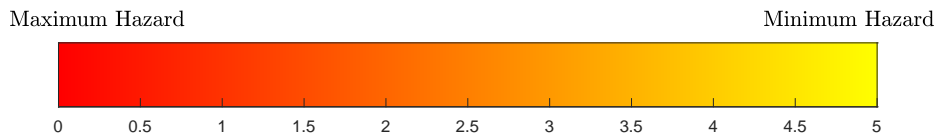Maximum Hazard   Minimum Hazard

Figure 0.0-2:   File: SanAntonio20-Jun-2020-INDICATOR-K