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Project Part 1

**Visualization Explanation**

The resulting graph from my analysis shows the percentage change in daily case data, changepoint region candidates indicated by the red regions, as well as different policy updates shown as dots. The X axis is a time series starting from April 15th 2020 and going until August 15th 2021. The reason for clipping the dates is because no other information was available for dates after August 15th. In order to determine policy changes that were worth looking into, I looked for points within the red regions that lied at local maxima and minima. Also of interest were points just before the red regions as there would be a delay in policy impact. The resulting points of interest were April15th 2020, July 29 2020 & Aug 3 2020,Sept 18 2020, Nov 17  2020, and April 28 2021. Afterwards, I went in and looked at the policy previous to each of these and evaluated what was different between the two that might have caused the difference in change of daily cases. April 15th was the first legal mask mandate instated as well as no indoor dining, but the rules were quite loose and vague. The next mandates (July 29 2020 & Aug 3 2020) were at a peak, where they instated theaters closing down as well as defined capacity thresholds for all establishments. Sept 18 2020 lies at a local minimum where they increased capacity thresholds to 75% and allowed theaters and venues and senior centers to open. The result was an uptick in the percentage change of daily cases. Nov 17  2020 didn't lie in a red region however it lied at an inflection point so it was worth looking at. Interestingly, they reduced the capacity constraints, reclosed senior centers and limited government gathering size. April 28 2021 was the only date I was unable to get data on however it lied before the last defined changepoint so it seemed worth further investigation.