Looking at the impact of \_\_\_\_\_ on COVID19 spread:

Weather

* Temperature /Humidity /Altitude /Airflow
* Resources
  + <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3311988/>
  + <https://www.who.int/environmental_health_emergencies/disease_outbreaks/communicable_diseases/en/>
* Databases
  + <https://climate.weather.gc.ca/> (CA)
  + <https://www.canada.ca/en/environment-climate-change/services/climate-change/canadian-centre-climate-services/display-download.html> (CA)
  + <https://www.ncdc.noaa.gov/> (USA)
  + <http://www.bom.gov.au/climate/data/> (AUS)
* Issues to account for within this analysis:
  + Variation of population density (normalize?)
  + COVID numbers are provided on a state/province wide level & weather patterns can vary widely across a single state/province
  + Social distancing regulations (and their acceptance) must be taken into account somehow

Air Quality

* Forest Fires / Heavy Air pollution
* Heavy smoke in atmospheres could lead to worse initial respiratory conditions. Potentially making populations more susceptible to a respiratory infection such as COVID?
* Databases
  + <https://www.canada.ca/en/environment-climate-change/services/air-pollution/monitoring-networks-data.html> (CA)
  + <https://data.gov.au/dataset/ds-sa-fdc08250-d282-4812-8c4e-29d225b8cf7d/details> (AUS)
  + <https://www.epa.gov/outdoor-air-quality-data> (USA)
  + <https://aqicn.org/> (CHINA +)
* Issues to account for within this analysis
  + See Weather Section
* In a country look at cities that were more effected by fires than those that weren’t

Natural disaster response

* Tornadoes / Hurricanes /Cyclones/ Earthquakes
* Death in wake of a natural disaster with COVID vs. without
* Issues to account for within this analysis
  + See Weather Section
  + Data resolution for this question may also be an issue

Political Stance

* Specifically looking at America and the reaction to social distancing guidelines and consequential COVID19 cases based on a states politics (republican vs democratic)
* Also interested in looking at countries with female leaders (NZ, Taiwan, Iceland…)
* Databases
  + <https://electionlab.mit.edu/data>
* Issues to account for within this analysis
  + Difficult to quantify a populations response to social distancing protocols
  + Population density must be accounted for (esp. since areas of higher population density tend to vote differently then lower density areas)
  + Is the method of reporting cases across the US the same?

Healthcare Access

* Vaccination Requirements in a region
* Number of available hospital beds per capita
* Public vs private healthcare
* Issues to account for within this analysis
  + Low healthcare may lead to lower reporting
  + Lower information density

Socio-Economic Status

* Access to education
* Access to healthcare
* Easier to social distance
* Issues to account for within this analysis
  + COVID numbers are provided on a state/province/country wide level & social-economic patterns can vary widely across a single state/province/country
  + Lower information density

Regional Industry

* Are areas dense in a specific industry (mining, agriculture, forestry, tourism, etc. ) more susceptible to a COVID outbreak?
* Issues to account for within this analysis
  + COVID numbers are provided on a state/province/country wide level & industry can vary widely across a single state/province/country
  + Low information density