1. Introduction
   1. Something about how political orientation impacts health behaviors and mortality rates and why it’s important to incorporate political orientation in models for measuring the spread of disease, etc.
      1. Classic modeling of spread of disease and usual variables incorporated.
      2. Short statement on how differently republicans and democrats responded towards the pandemic.
         1. Explain how context and homophily can impact the spread of disease
   2. Transition into explaining how political views might be context-dependent
   3. **Research questions**
      1. How is political orientation (democrat, republican, independent) associated with health behaviors during the pandemic?
      2. What are the key parameters that drive/mitigate these differences? For example, how does population composition change things?
         1. Is it mostly driven by concern?
         2. Response to incidence?
      3. How exactly does including political orientation into in dynamical models impact the spread of disease and mortality, etc?
2. Background
   1. Review of literature on
      1. Understanding why political affiliation might impact health behaviors, for example differential contact rates
      2. Understanding why political context matters and how
      3. Understanding how models on the spread of disease are traditional constructed
   2. Explain that there is a major gap in the literature in that there is hardly any work that considers political affiliation using spread of disease models and how we aim to fill that gap
3. Data and methods
   1. BICS overview
   2. Sample info
   3. Questions on perception and behavior during the pandemic
      1. Maybe a table on descriptive
         1. (who is more likely to say they are concerned, contact rates, etc)
         2. Differences between republican, democrats, and independents
   4. Modeling approach
      1. Phase 1: multivariate models to describe the magnitude of the “effect”
         1. Democrat versus republican versus independent
            1. Perception of pandemic and reported behaviors
            2. Contact rates
            3. Mask-usage
            4. Vaccination
            5. Responsiveness to incidence
      2. Phase 2: Heterogeneous Mixing Model (multiple group SIR model)
         1. Explain components that will be most important
   5. Control variables and the sources of data
      1. Why we chose districts
      2. Voter behavior data
      3. Etc
4. Results
   1. General differences between republicans and democrats
      1. Perception of the pandemic
      2. Contact rates
      3. Mask usage
      4. vaccines
   2. How these differences are impacted by being in an opposing party district
      1. Does perception of the pandemic change depending on context
      2. Do partisans in opposing party districts differ from partisans in their own districts in contact rates, mask usage, vaccination (things that impact the spread of disease)
   3. SIR model results
      1. Given what we know about general differences between D, R, I, how might this impact a future pandemic
         1. Spread of disease
         2. Mortality
         3. Knowing that republicans and democrats differ so drastically in contact rates, mask usage, etc (not simply due to demographic and geographic differences)
      2. Given what we know about political context, how might this change the results of the model?
         1. Knowing that democrats more likely to be in their own districts
         2. Knowing that republicans are more likely to shift their behavior
      3. Concrete consequences
         1. How many more deaths from group R versus D
         2. What is the biggest driver of consequences
      4. Others?
5. Discussion and conclusion
   1. Discussion
      1. Why does political affiliation matter?
         1. Perception > behavior > spread
      2. The ways that context can change behavior of partisans
         1. How this might be playing out
      3. The public health implications of SIR models
         1. What actionable information they provide
         2. How public health experts should incorporate political affiliation into their action plans
         3. Other?
   2. Limitations
      1. Not causal
         1. Sample limitations
      2. Short time period (not before or after pandemic)
      3. Contextual differences could be due to selection, not clear
      4. SIR model limitations