**Notes**

Control for race; it is a confounder, so we should control for it

Use the list of controls in their paper

**How to avoid bias?**

4 types:

Confounding- (variable associated with input and output)

fix this by controlling for variables or isolate for race, or use weights(standardization), gun policy could be affected by age, along with gun violence

Selection bias- (when you have differential influence regarding who participates in research)

Information bias/measurement error- (ex: suppose someone is diagnosed with a disease and the diagnostic test has a certain percentage of people that will generate a false positive/false negative, take in consideration the diagnosis has been misspecified)

Mortality rates might have measurement error (underreporting of homicides, some may be misclassified (justifiable homicides))

Misclassification bias in exposure and output

**Should split up into how laws affect suicide, homicide, accidents?**

Up to us, recommendation is to be as specific as possible and justify decision, don’t do a poor job of doing everything, (suicide is not covered by media), each one in it of itself would be interesting

Question should we irrs?

They looked in change of counts over time, why they used IRRs, but only use them if we want to look at that same type of outcome, look into prevalence ratios.

**Objective way to figure out gun law weights:**

Some sort of classification analysis, one that is popular is latent class modelling, latent class models have outcomes (ex homicide), have policies as explanatory variables, which policies group together among high homicide states vs low homicide states, statistical approach to figure out which policies are closely associated with higher/lower rates

**Siegel mentioned only control for one economic variable**

Highly correlated variables can lead to problems within the model, if three variables correlate with another variable just throw the one variable in the model (but sometimes go back and do the analysis just to satisfy critics)

**How did you make the data set?**

Collection of exposure info, policy database

In public health, the way you have biggest impact is to implement policies that affect millions. Have other policy database

Possibilities:

Pick several strong policies

Compare the effects of policies

Pick a strong and weak policy and compare them

You should always start as focussed as possible, then build on what you learn

Pick a question, make a plan, answer it, see where it takes you next

Build off of smaller work from where you started