Overall project considerations re comparing national versus New York data – how different is the situation right now? If the long term trends can be related, then yes, go for it.

Can we visualize risk and proportions?

* Charts – each hundred kids are a dot.

Re search term spikes, no need to lag it. No need to try to predict cases – display trends and be selective, demonstrate the interesting results to give a cohesive story. Focus on telling a story and using the tools we learned in class.

**Search Terms**

Measles-related Google search terms:

* Measles symptoms
* Symptoms of the measles
* Measles rash
* Measles pictures

Anti-vaxxer Google search terms

* Vaccines cause autism
* Vaccines and autism

On Twitter:

* Check: measles
* Pro-vaccines: “vaccineswork”
* Anti-vaxxer: “vaccinescauseautism”
* Consider different geographic levels within New York (state, city,

**Deliverables**

Static plots:

* Line graph of:
  + measles cases of time
  + Measles searches over time
  + Anti-vax sentiment over time
  + Immunization rates

Maps:

* Plots of measles cases, state-level chloropleth
* Plots of measles cases, county-level chloropleth
* Plots of measles cases, metro-area chloropleth, if possible

Text Analysis

* Word cloud of social media data during outbreak
* Word cloud of specific anti vaxxer twitter handles during current outbreak