Covid-19 Graphics:

The Good, the bad, and the somewhat useful

* Data Visualizations Breakthrough Moment
  + Responsibilities
    - <https://medium.com/nightingale/ten-considerations-before-you-create-another-chart-about-covid-19-27d3bd691be8>
  + The dramatic rise of data visualization could be traced to hardware factors such as widespread use of high-resolution large desktop displays tied to powerful computers. Other important trends are the increased availability of vast data resources, familiarity with data management software, and innovative web-based software that support rapid display and update of visual information.
  + The complexity and importance of COVID-19 has put data visualization center stage in worldwide discussions. The free public websites have boosted [data visualization literacy](https://www.pnas.org/content/116/6/1857), which could lead to more people using interactive tools to explore data for many applications and then presenting their results to more receptive visually literate audiences.
* “Flatten the curve”
  + <https://eagereyes.org/blog/2020/the-visual-evolution-of-the-flattening-the-curve-information-graphic> (March 15, 2020)
    - a clear and straightforward message, a foundation on science, a clear tagline that you might call actionable, and enough visual elements to be informative enough without getting overwhelming
    - To be clear, this is not data or a visualization. It's an illustration based on a conceptual drawing, which in turn is based on simulations. It's also a cartoon,
  + <https://medium.com/@joschabach/flattening-the-curve-is-a-deadly-delusion-eea324fe9727> (March 13, 2020)
  + <https://www.bloomberg.com/opinion/articles/2020-04-16/coronavirus-this-isn-t-the-flattened-curve-we-were-promised> (April 16, 2020)
    - They’re all symmetrical, indicating that once a population has reached the peak, the disease will taper away just as quickly as it grew.
  + <https://www.washingtonpost.com/graphics/2020/world/corona-simulator/> Simulation
* Case Counts
  + Cumulative, new daily, active, recovered, hospitalized, dead, rates, etc.
* Maps (are hard)
  + Choropleth
  + Symbol
  + Dot???
  + Colors. Not red!!!
  + Local vs Global
  + <https://www.esri.com/arcgis-blog/products/product/mapping/mapping-coronavirus-responsibly/>
* Testing for Covid-19
* Overarching Themes
  + Toggle between log/linear (exponential growth is hard to show and hard to wrap our minds around.
    - **pointwise exponential**
    - **Logistic curve + exponential decay smooshed together**
  + Align axis to be number of days since…
  + Rolling averages
  + Population standardizing
  + Conditioned on age, sex, health condition etc.
  + Exponential Growth -> Constantly changing data (static vs interactive)
* Visualizing Uncertainty
* Forecasting
  + Not a crystal ball. A way to see the potential future. <https://medium.com/nightingale/covid-19-data-literacy-is-for-everyone-46120b58cec9>
* Other things to visualize besides case counts
  + <https://searchingcovid19.com/>
  + Weird & Original <https://twitter.com/W_R_Chase/status/1255299978903334913?s=20>
* Common resources
  + Datawrapper
  + Nightingale