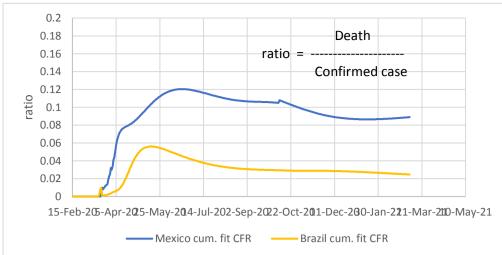
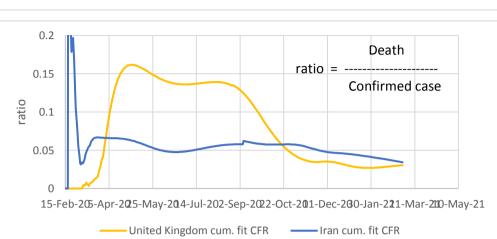
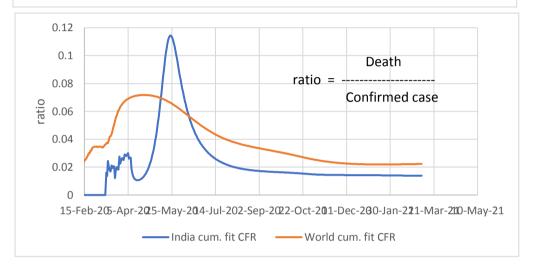
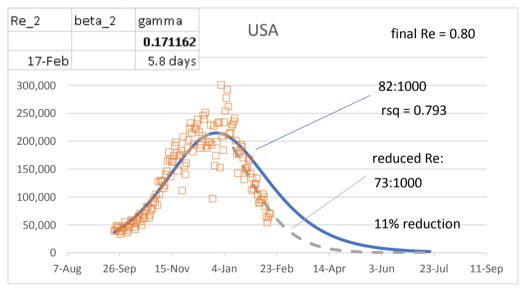
Experimental page: ratios of curve fit deaths to curve fit confirmed cases (CFR)



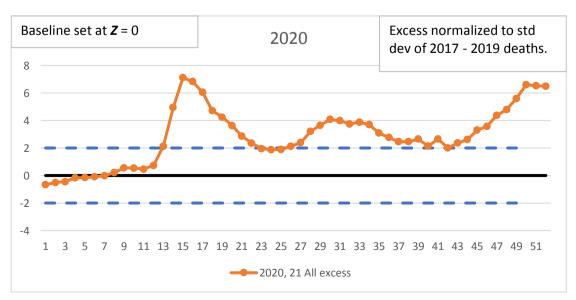


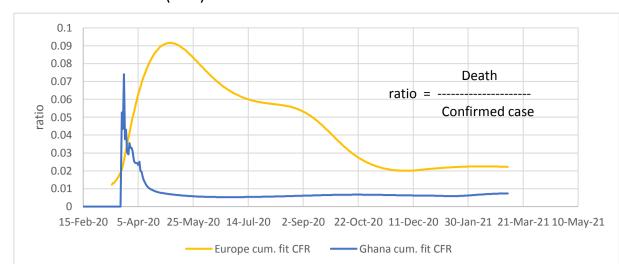


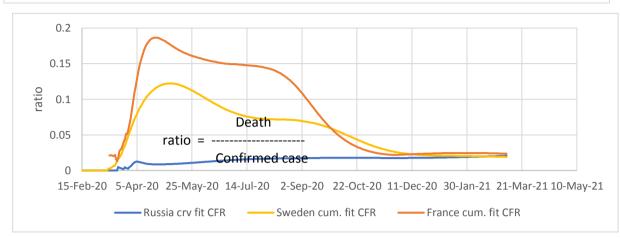
Demonstration of SIR model where $R_{\,e}$ is linearly reduced to 0.80 at the end of the sequence:

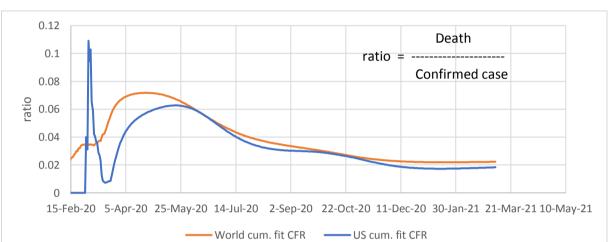


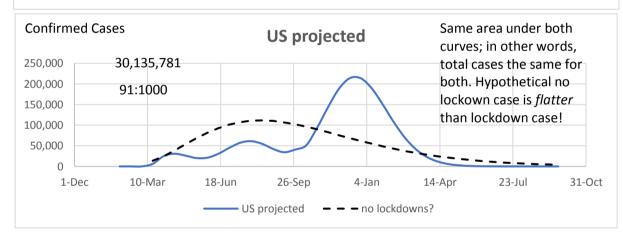
Reducing the R_e while keeping gamma constant is the same as reducing contact rate. Contact rate is reduced through isolation, lockdowns, and vaccinations. Seems to indicate timing of start of measures is a big factor. The orange data taken as without measures, but we know certain measures were taken. Hard to determine effect, without a basis of comparison.

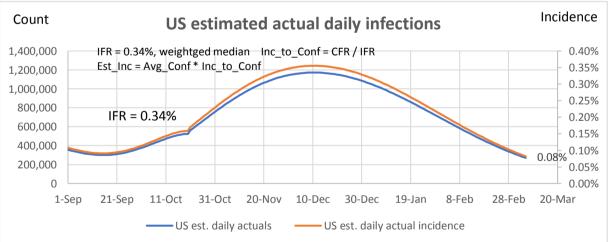










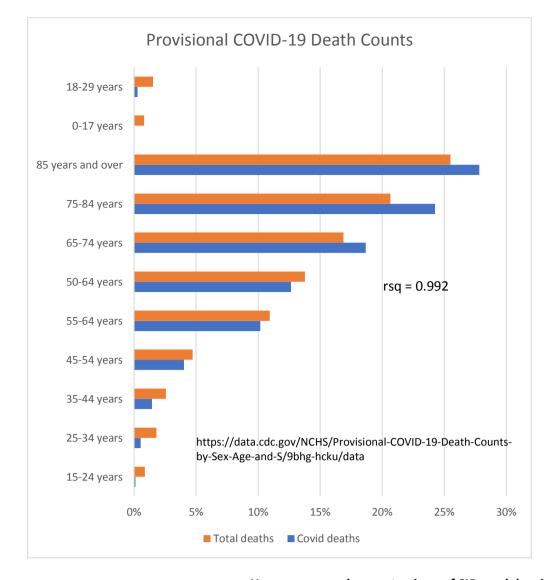


False Positives Demonstration

Use 0.08% from US est. incidence above as estimated daily incidence *Prevalence* estimated as avg. infected period of 2 weeks X incidence

| | 99% | accuracy of test | | | 0.08% X 14 = 1.120% |
|---|----------|------------------|----------|---------------|---------------------|
| | | Positive | Negative | | |
| | test pos | 1.109% | 0.989% | 2.10% | |
| | test neg | 0.011% | 97.891% | <u>97.90%</u> | |
| • | | 1.120% | 98.880% | 100.00% | |

Counter-act this tendency by increasing test sensitivity. However this may increase false negatives, the recipients of which may be positive, think they're negative, and go spread it around some more.



USA Excess Deaths (from CDC data):

Annualized on 52 weeks

| | | All Cause | All Cause, excl. CV19 | CV19 | | | | |
|---|------------------------|--------------|-----------------------|-------------|--|--|--|--|
| 3 | yr average before 2020 | 859:100,000 | 859:100,000 | - | | | | |
| | 2020 | 1009:100,000 | 899:100,000 | - | | | | |
| | Diff. | 150:100.000 | 40:100.000 | 110:100.000 | | | | |

3 yr average 859:100.000

27% of All-Cause excess deaths are non-CV19

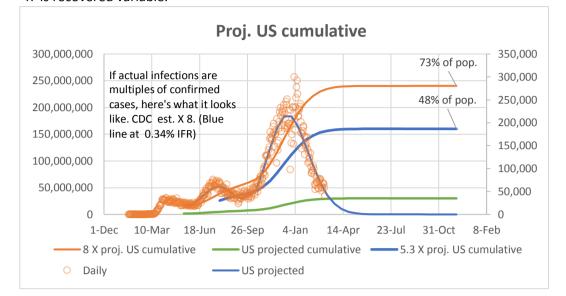
https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data

K = 0.318

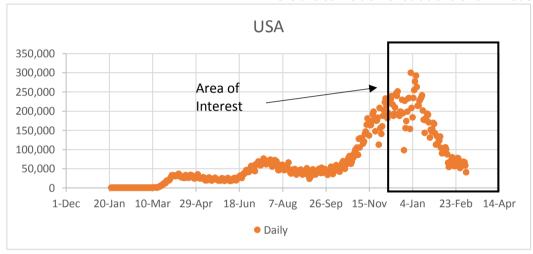
gamma = 0.171 $R_o = \exp(K/\text{gamma}) = 6.42$ gamma = 0.286 $R > [1-1/R_0]/N = 3.04$ 84% <=Herd immunity

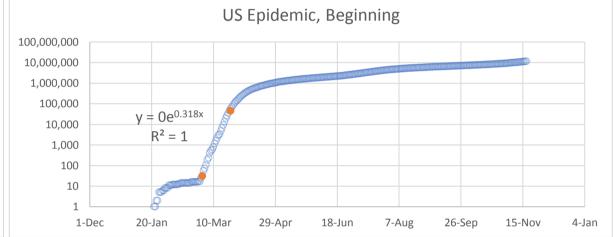
gamma = 0.286

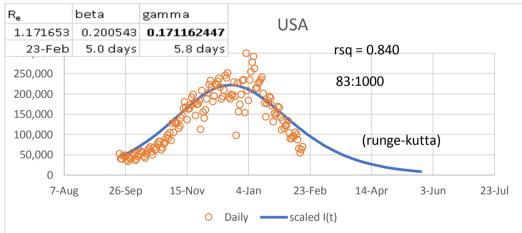
R is recovered variable.

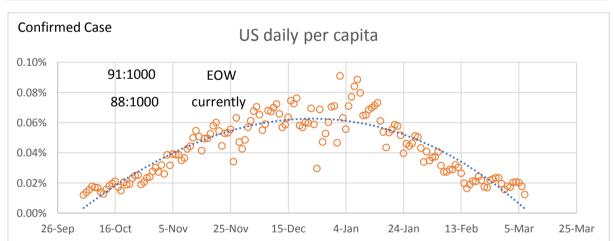


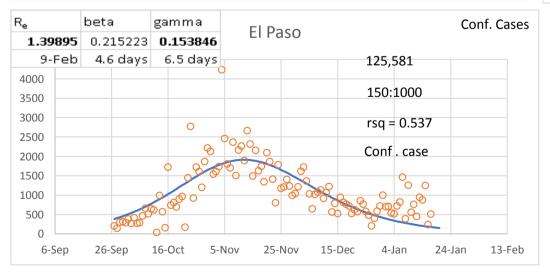
Here are some demonstrations of SIR model, using $R_{\rm e}$, gamma, and beta

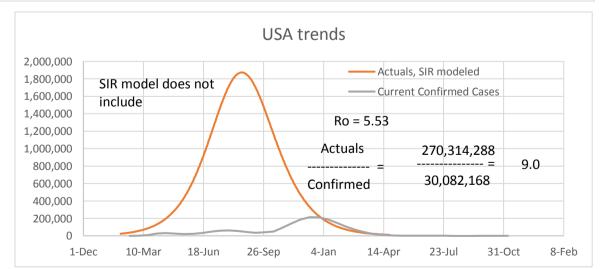


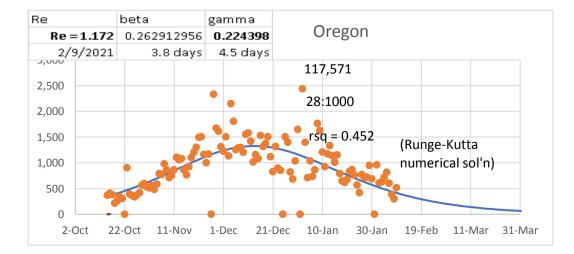


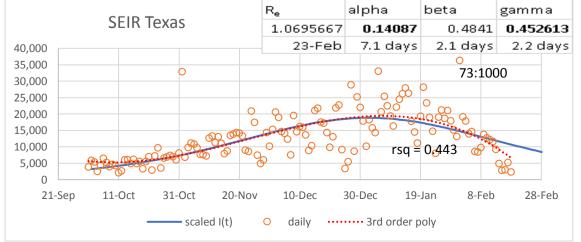


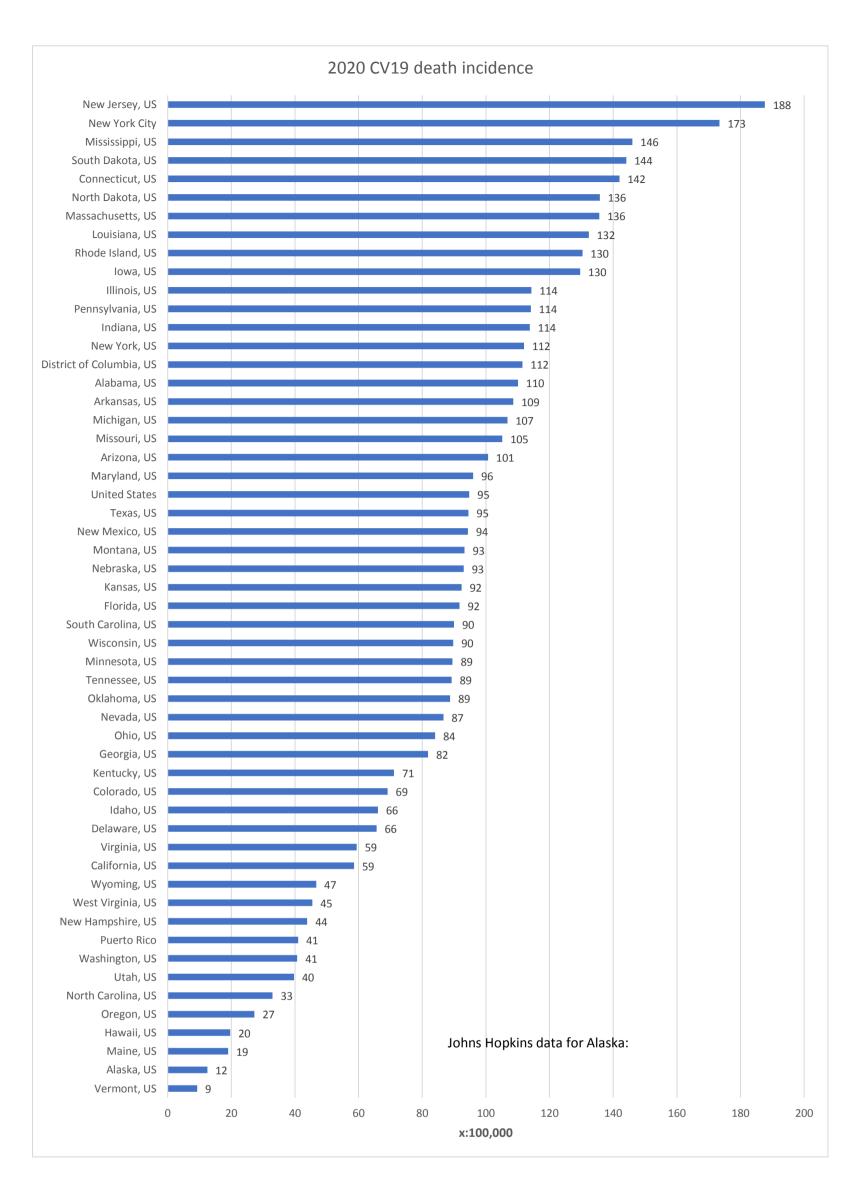












https://data.cdc.gov/NCHS/Weekly-Counts-of-Deaths-by-State-and-Select-Causes/muzy-jte6/data