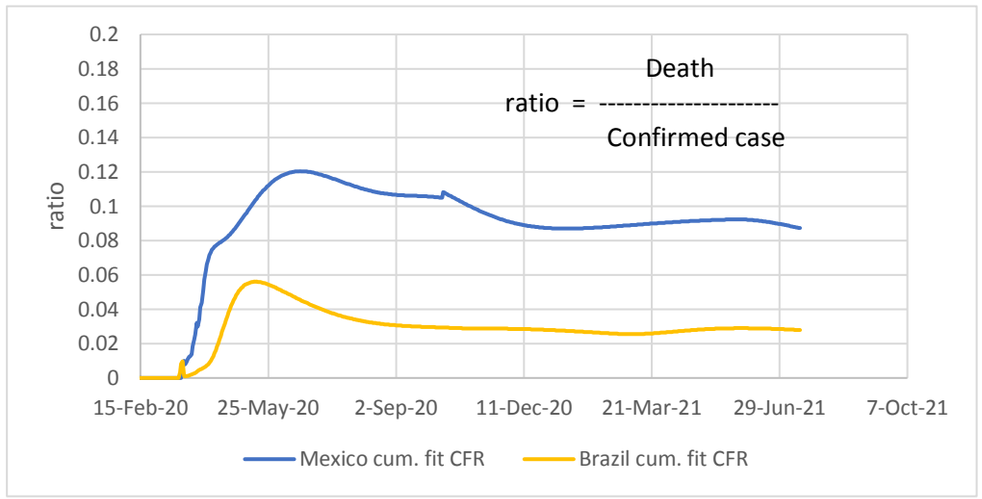
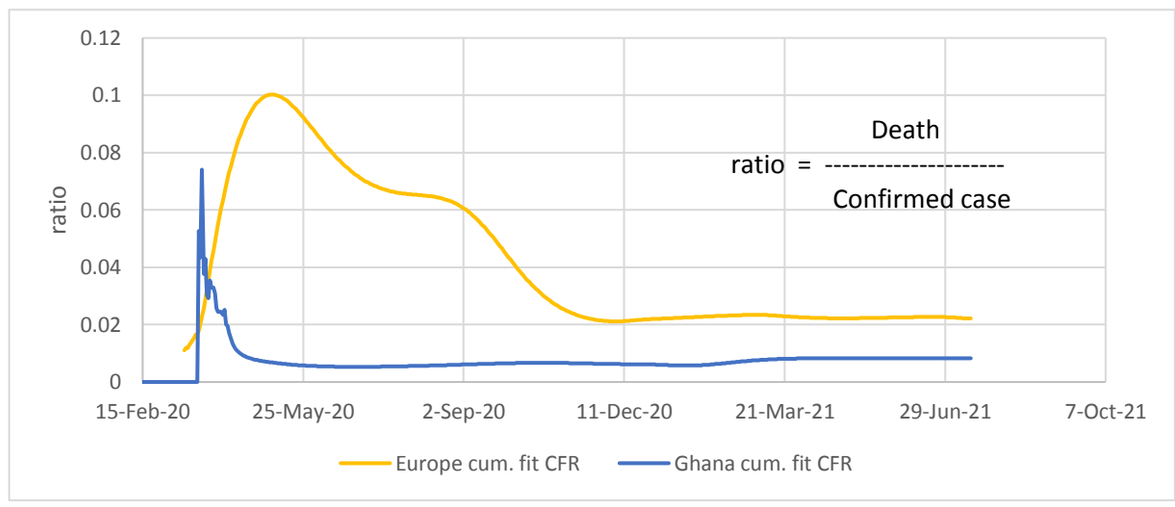
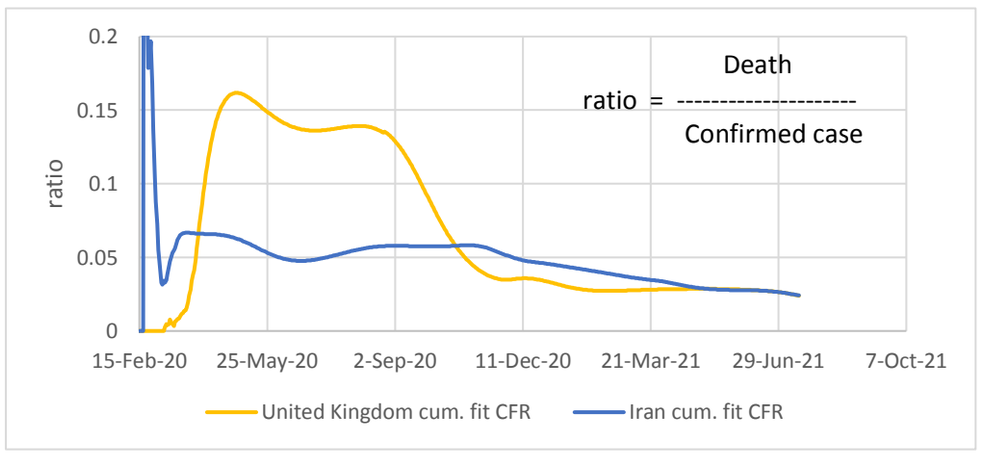
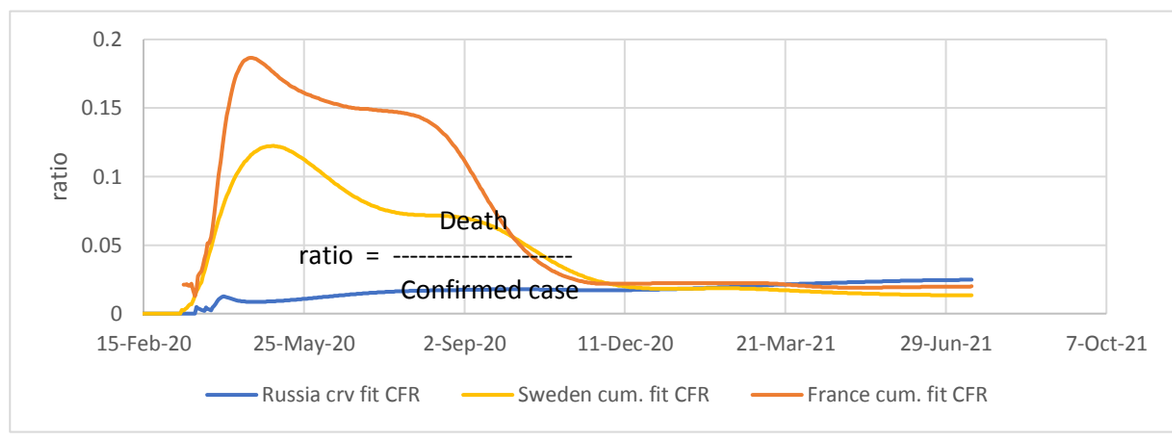
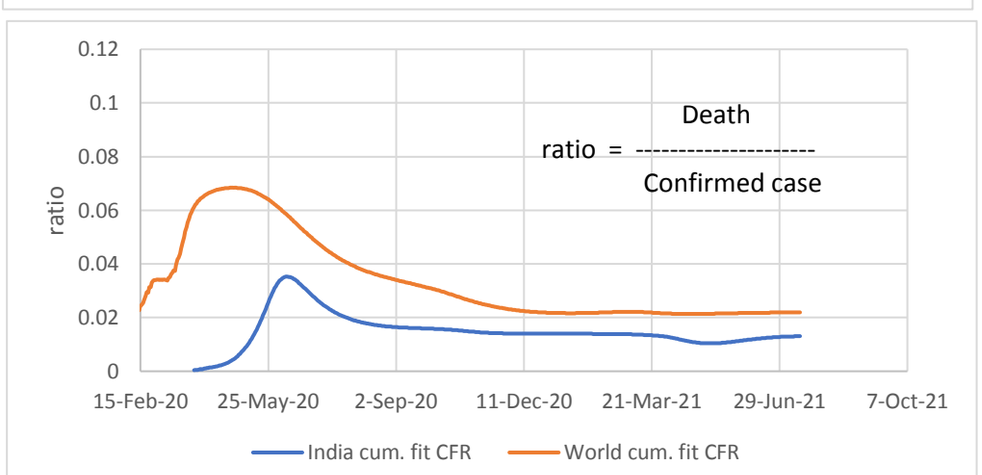
Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

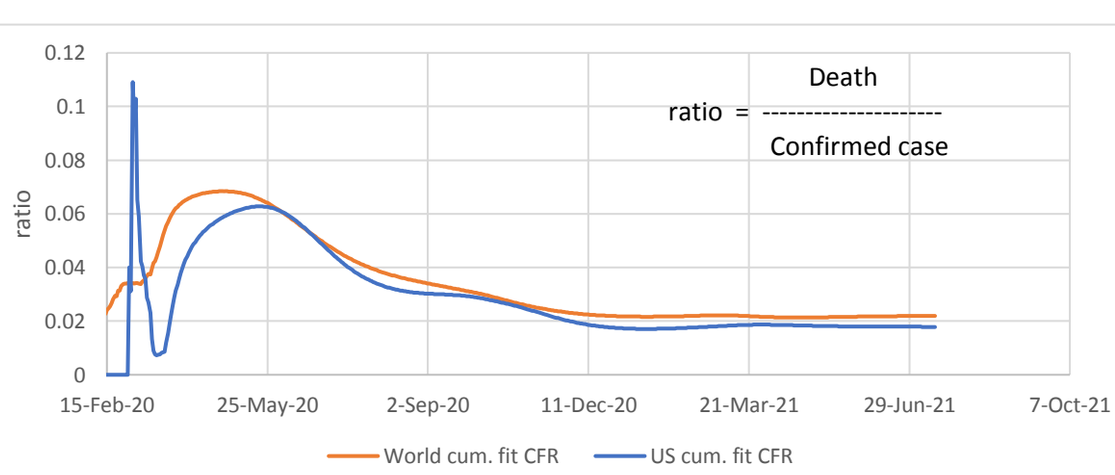




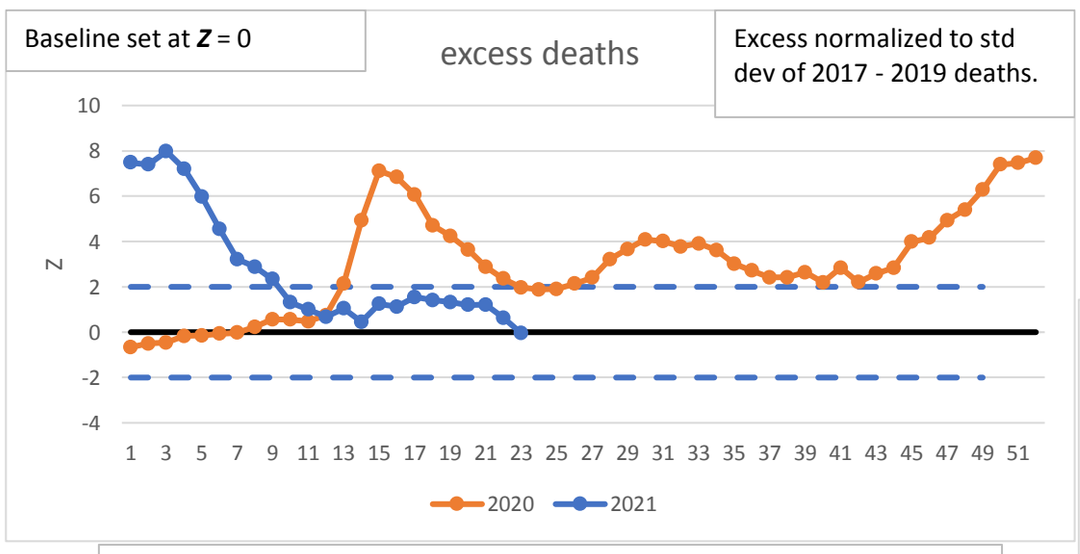






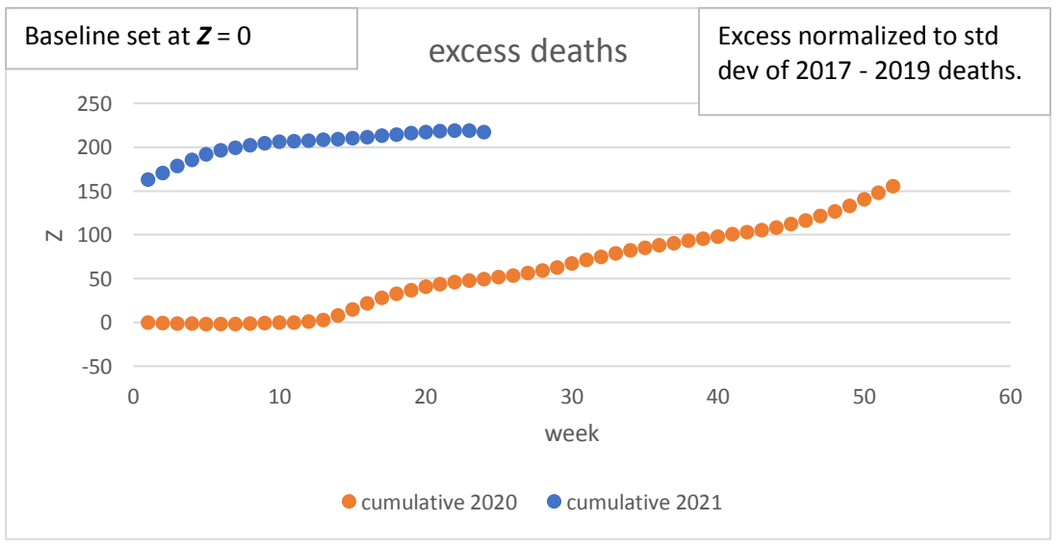


Excess deaths as a Z score:

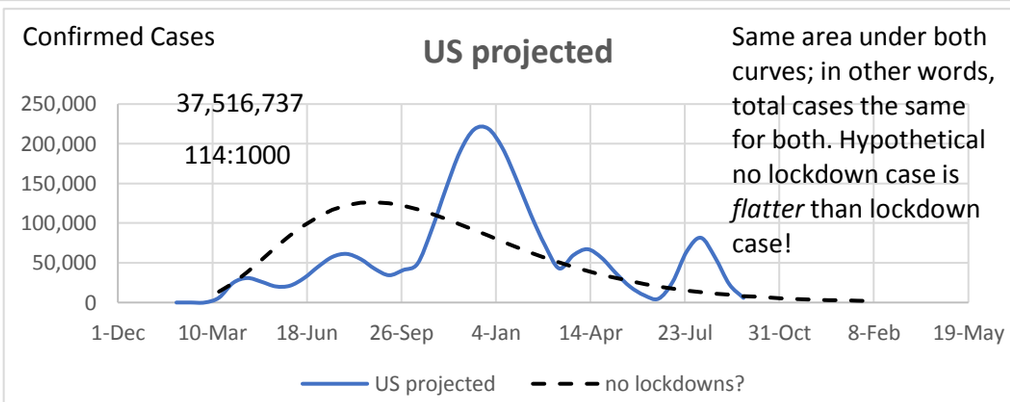


Above based on Z score of three year standard deviation from 2017-2019. What follows is cumulative plot of same.

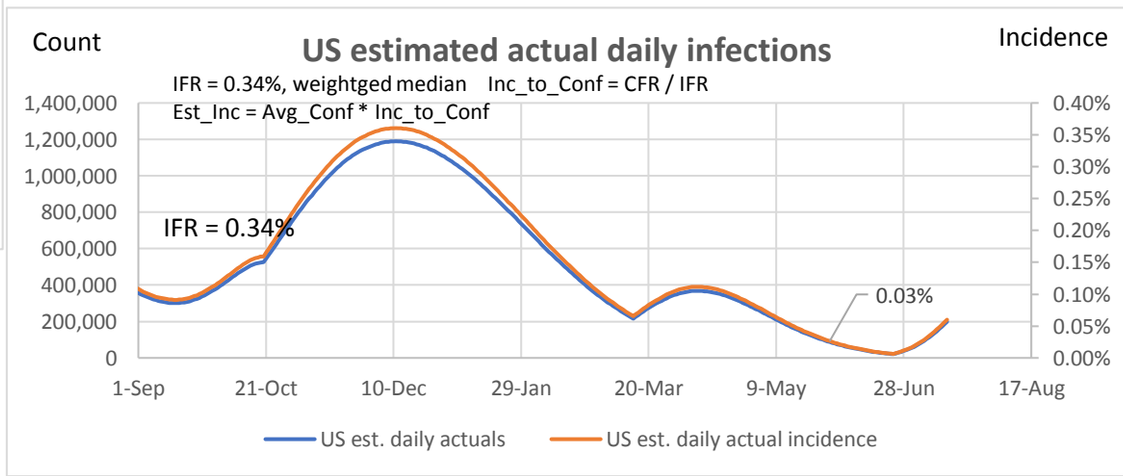
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely



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



Same area under both curves; in other words, total cases the same for both. Hypothetical no lockdown case is *flatter* than lockdown case!



False Positives Demonstration

Use 0.04% as estimated daily incidence

Prevalence estimated as avg. infected period of 2 weeks X incidence

0.04% X 14 = 0.560%

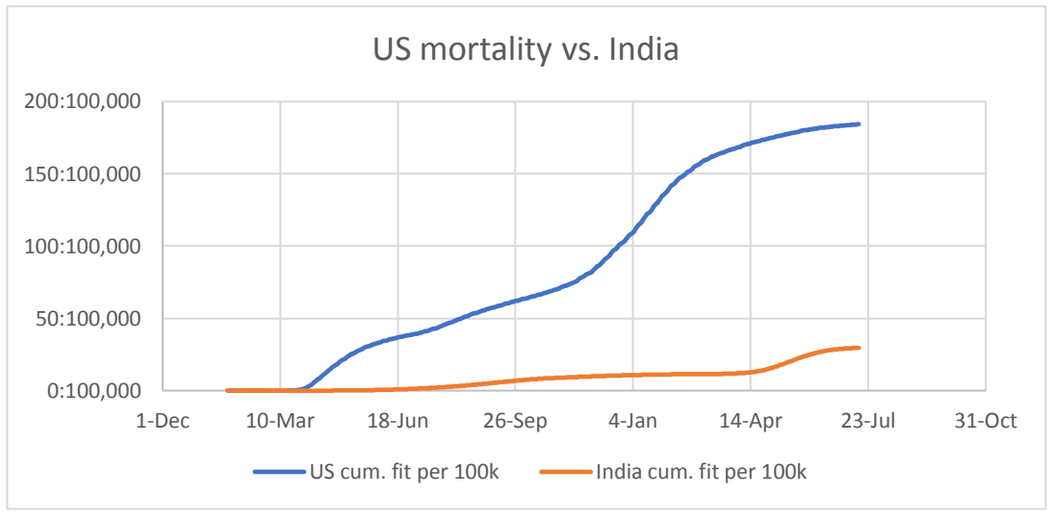
99% accuracy of test

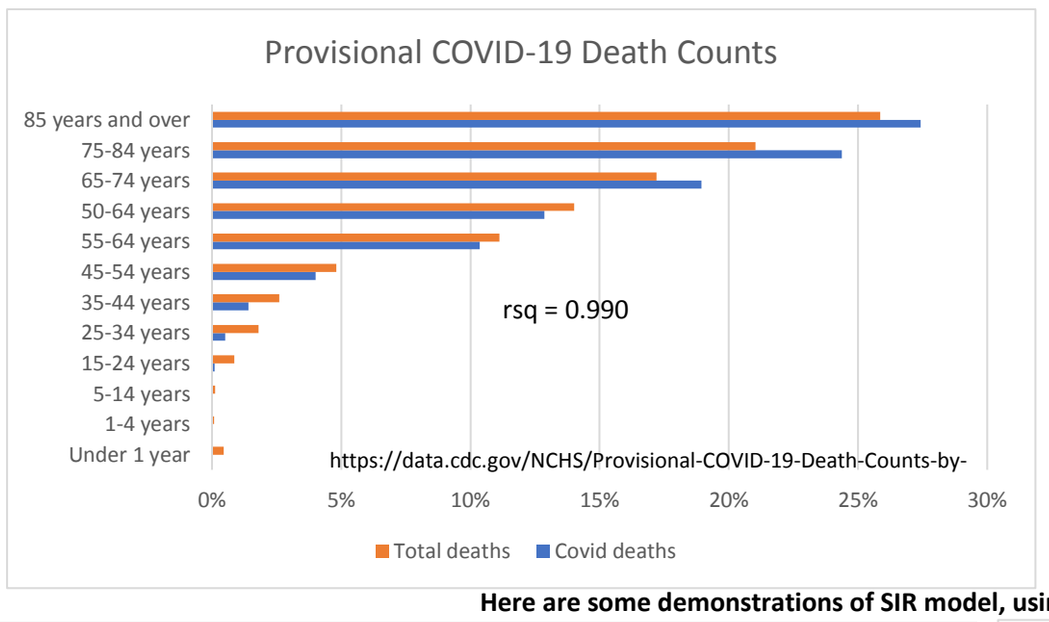
	Positive	Negative	
test pos	0.554%	0.994%	1.55%
test neg	0.006%	98.446%	98.45%
	0.560%	99.440%	100.00%

False pos. is more than half of total positives.

TRUE +	0.554%/1.55%	35.8%
FALSE +	0.994%/1.55%	64.2%
Total	----------	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	1016:100,000	905:100,000	-
Diff.	157:100,000	46:100,000	111:100,000

3 yr average
859:100,000

29% of All-Cause excess deaths are non-CV19

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

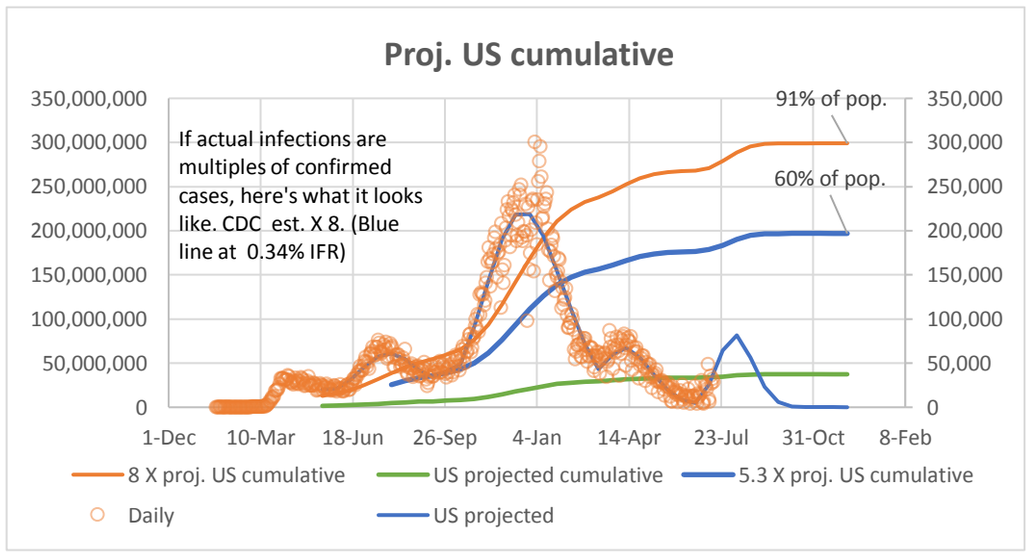
K = 0.318 R_o: R :

gamma = 0.171 $R_o = \exp(K/\text{gamma})$ = 6.42 84%

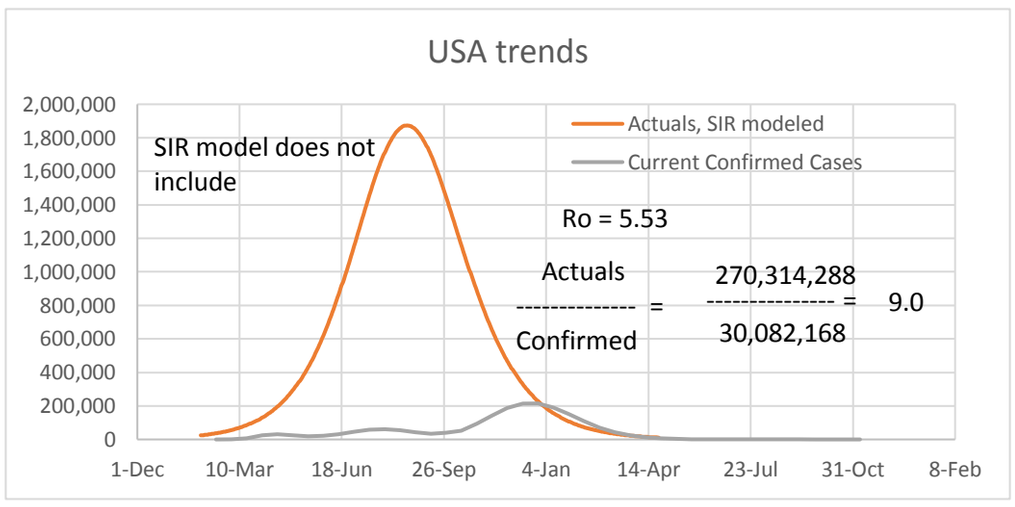
gamma = 0.286 $R > 1 - 1/R_o$ = 3.04 67%

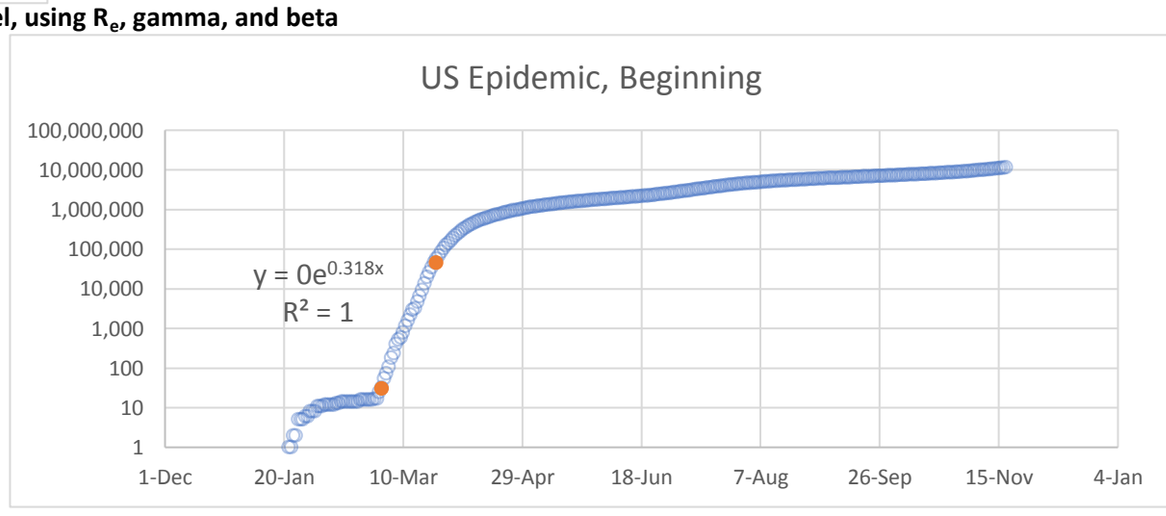
<=Herd immunity

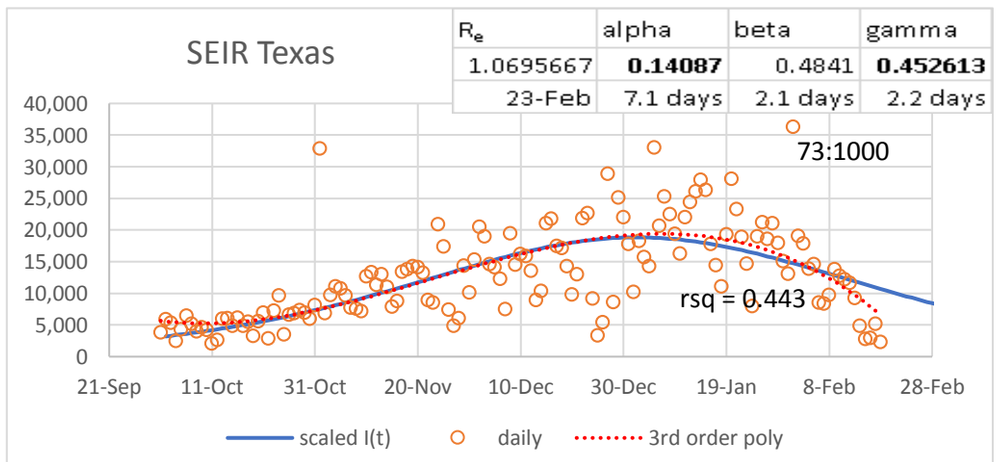
R is *recovered* variable.

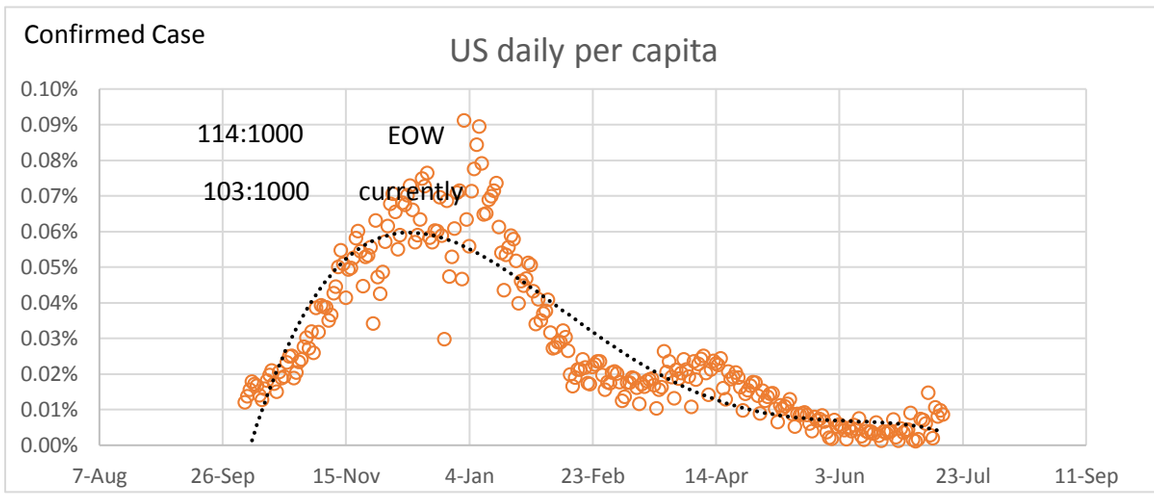


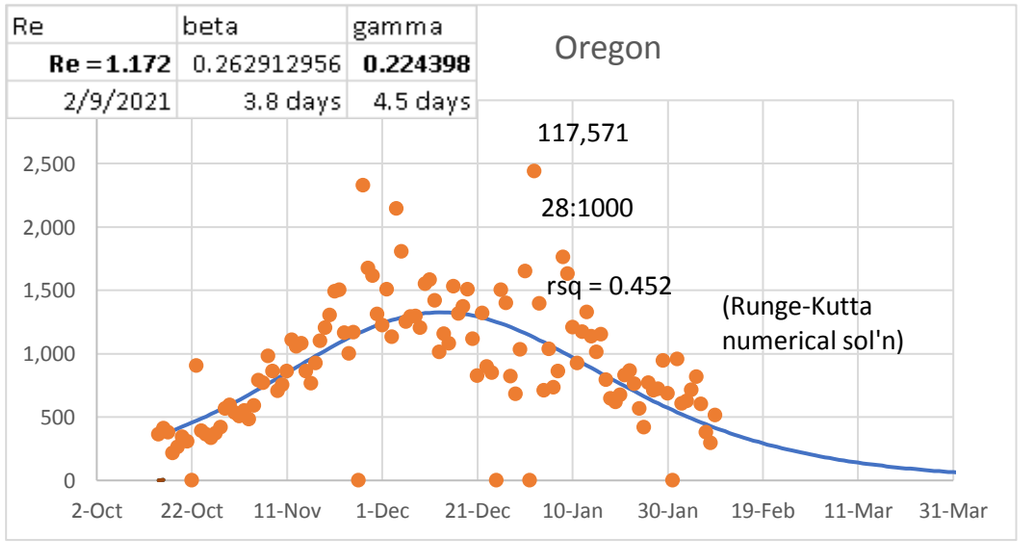
Here are some demonstrations of SIR model, using R_e, gamma, and beta

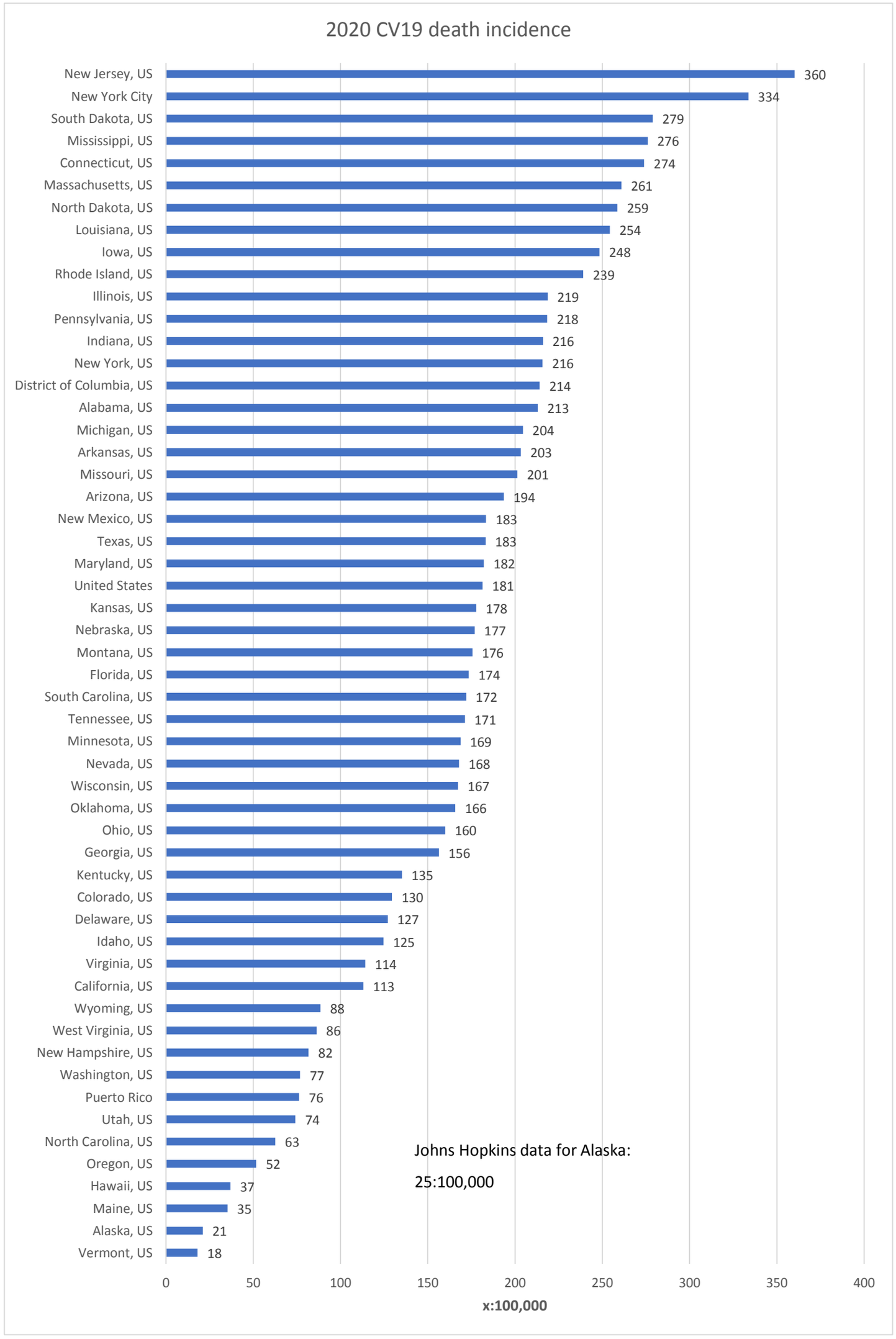












https://data.cdc.gov/NCHS/Weekly-Counts-of-Deaths-by-State-and-Select-Causes/muzy-jte6/data