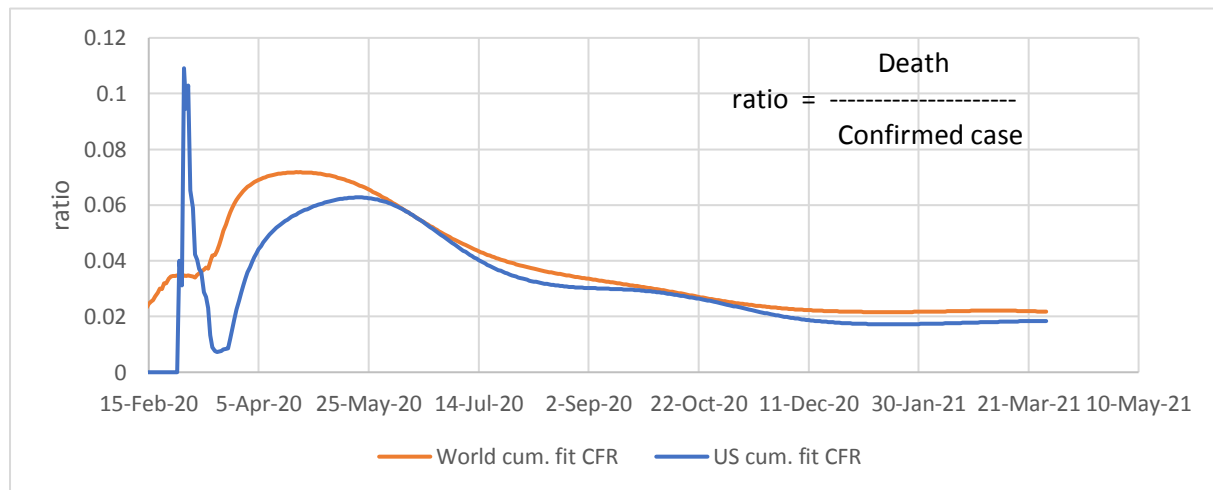
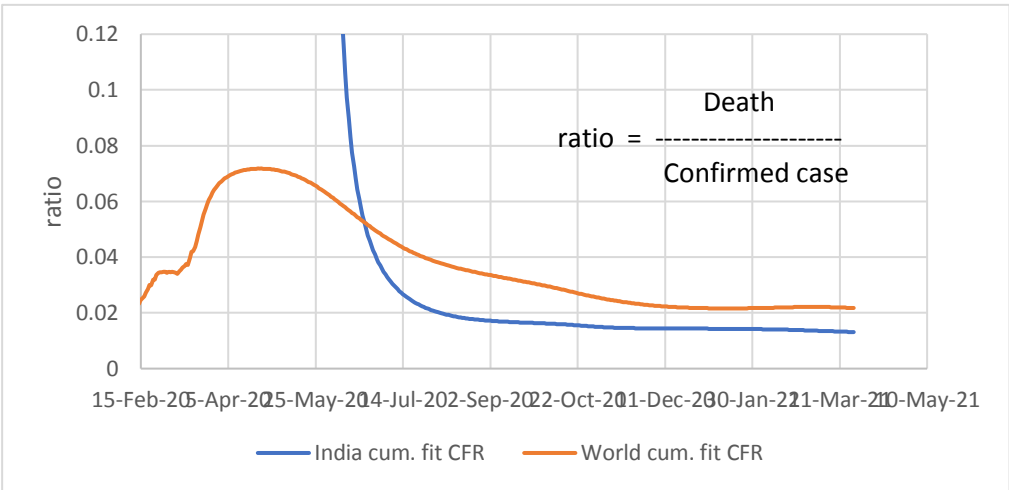
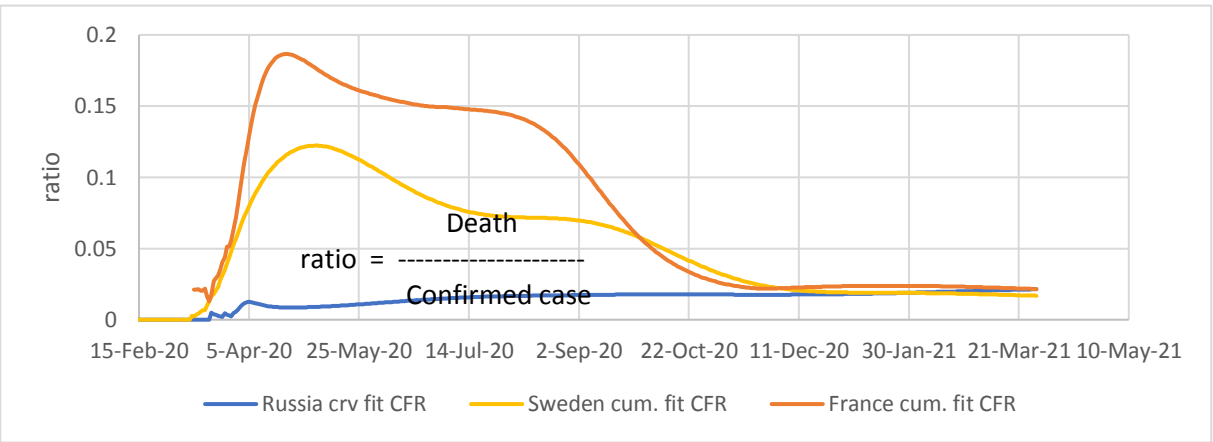
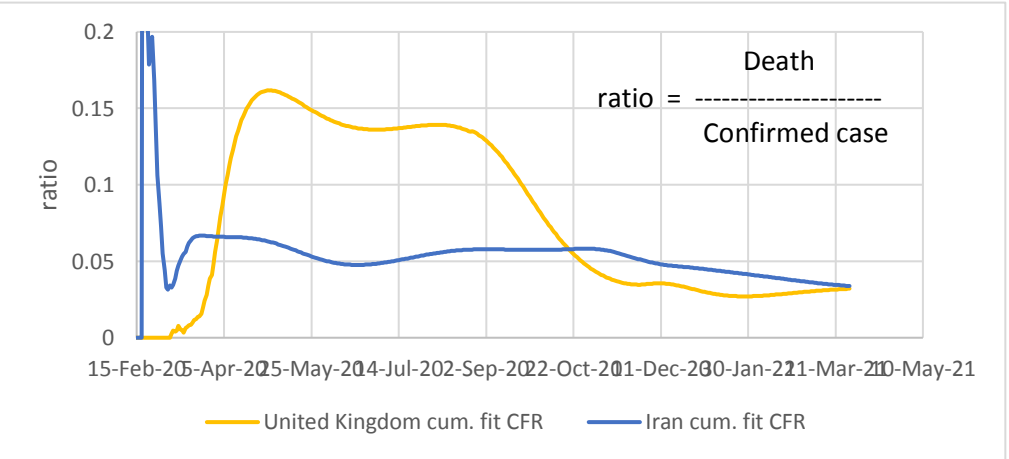
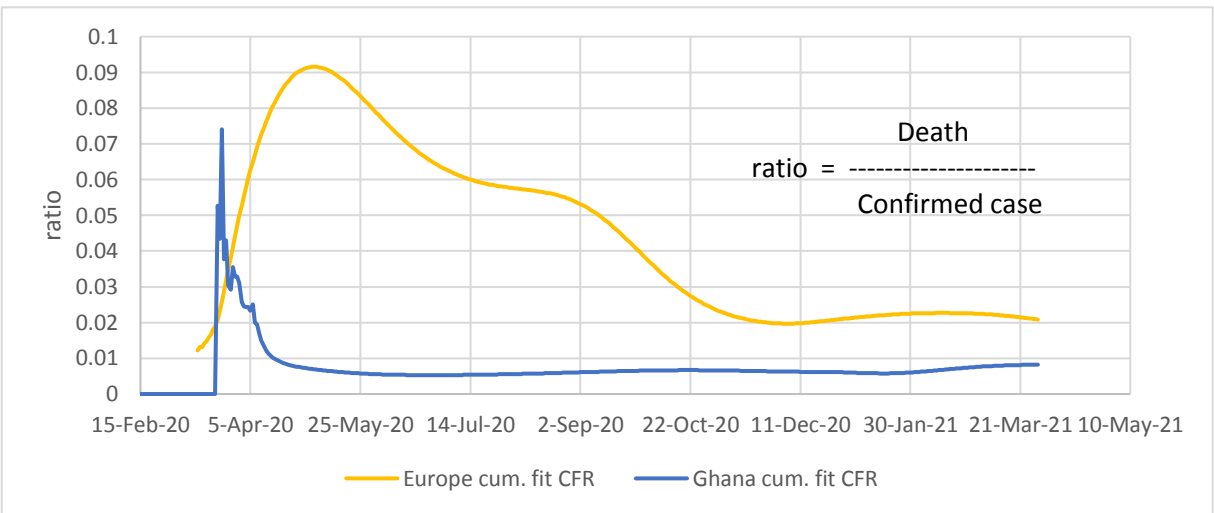
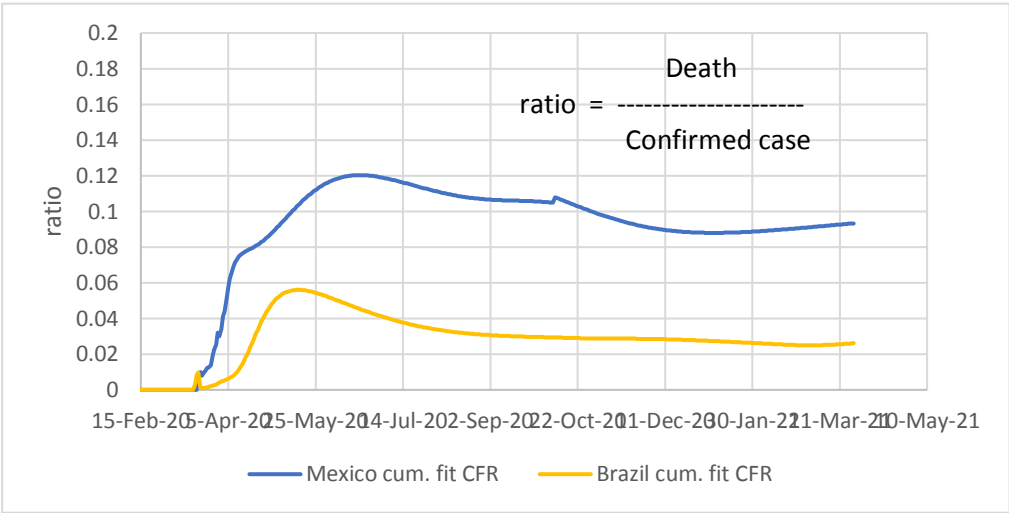
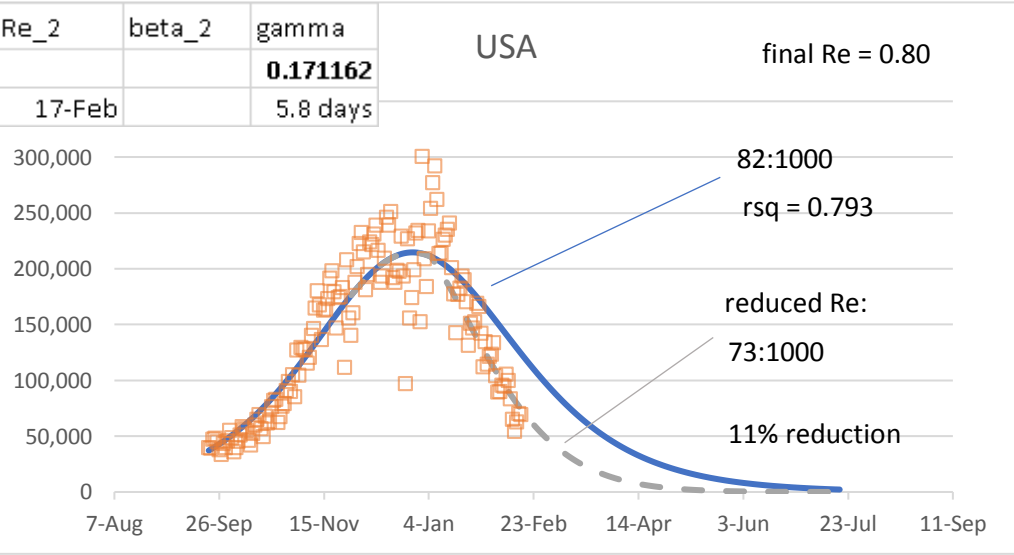


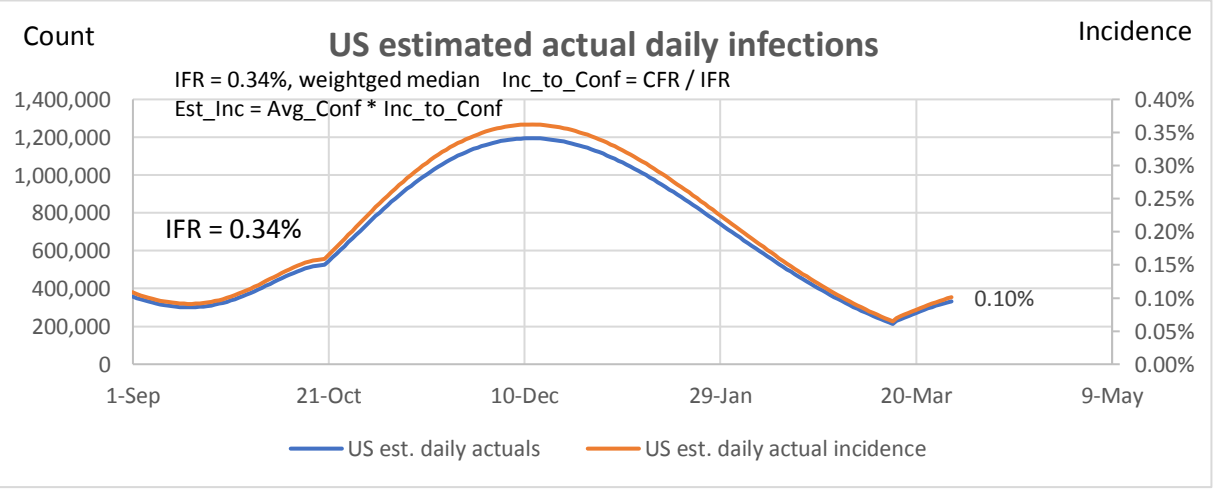
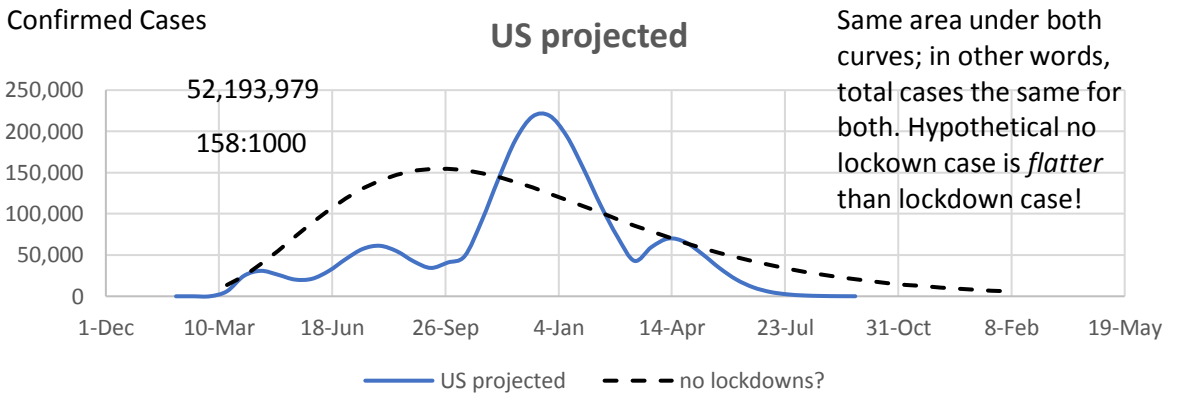
Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)



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.



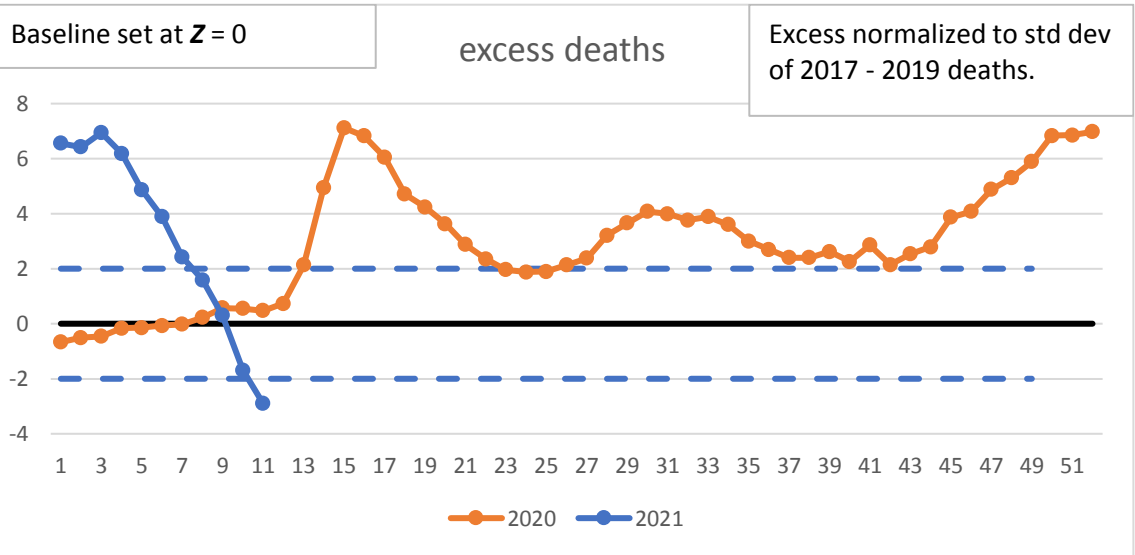
False Positives Demonstration

Use 0.10% from US est. incidence above as estimated daily incidence  
Prevalence estimated as avg. infected period of 2 weeks X incidence  
99% accuracy of test  
0.10% X 14 = 1.400%

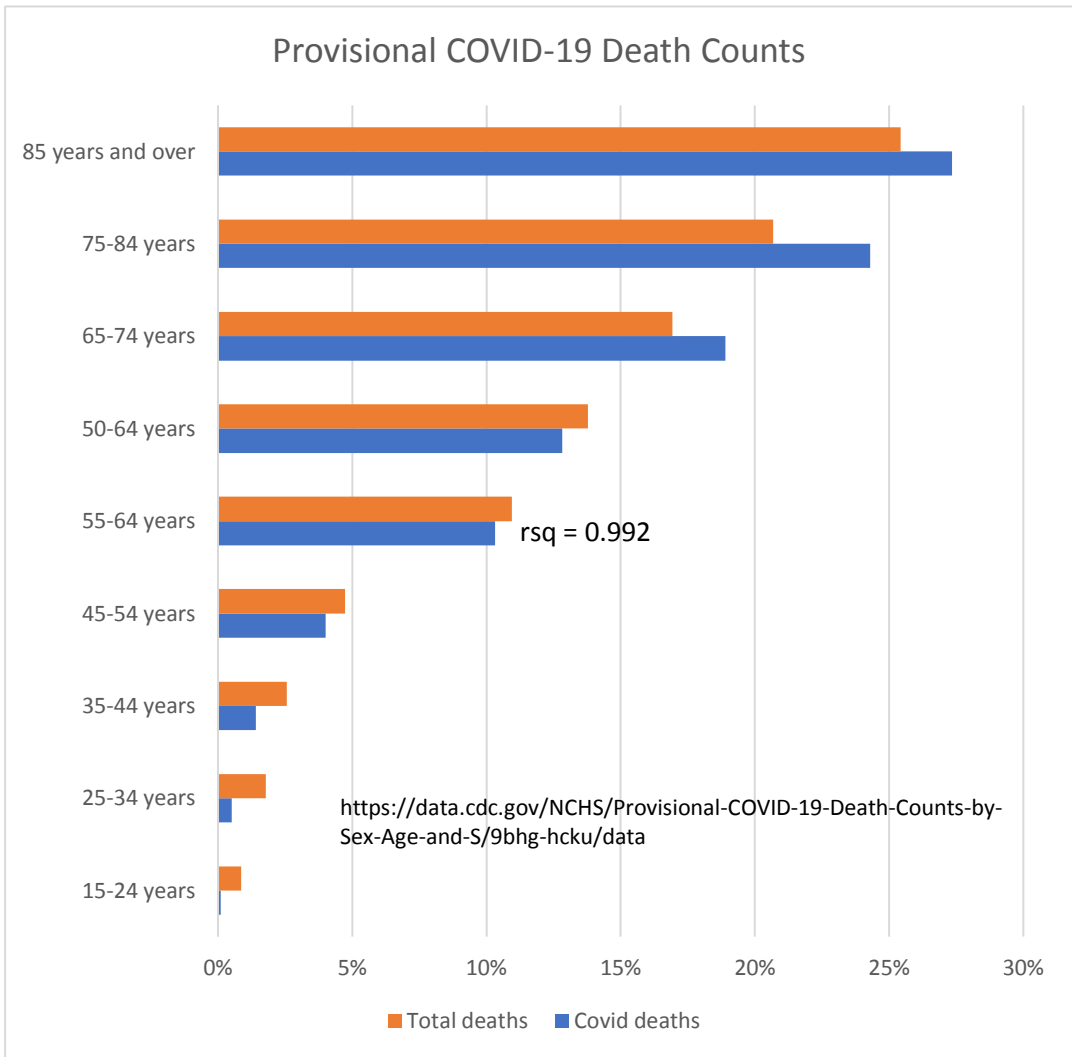
	Positive	Negative	
test pos	1.386%	0.986%	2.37%
test neg	0.014%	97.614%	97.63%
	1.400%	98.600%	100.00%

False pos. is less than half of total positives.  
TRUE + 1.386%/2.37% 58.4%  
FALSE + 0.986%/2.37% 41.6%  
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.



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



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	1013:100,000	903:100,000	-
Diff.	154:100,000	44:100,000	110:100,000

3 yr average	28% of All-Cause excess deaths are non-CV19
859:100,000	

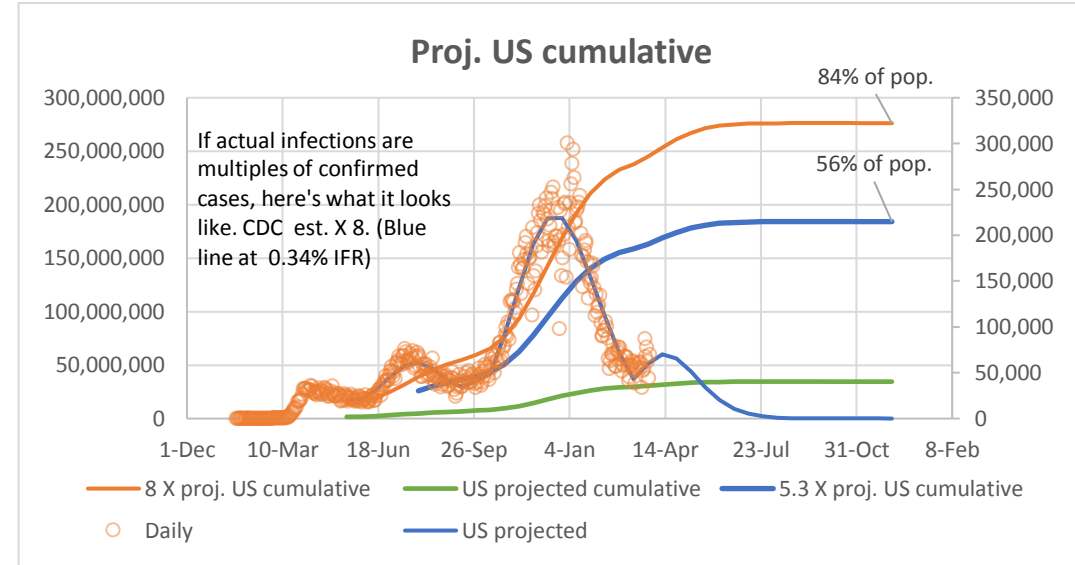
<https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data>

$K = 0.318$

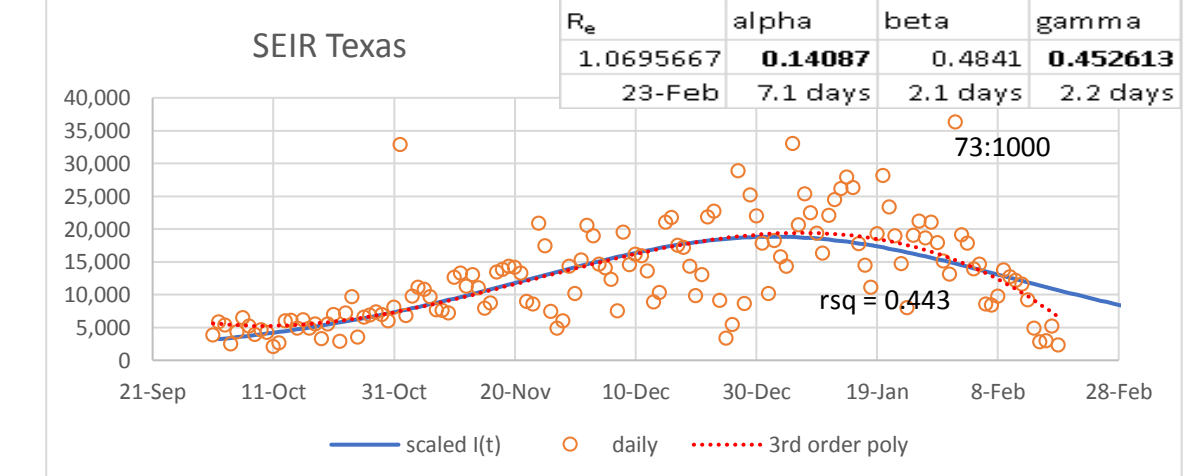
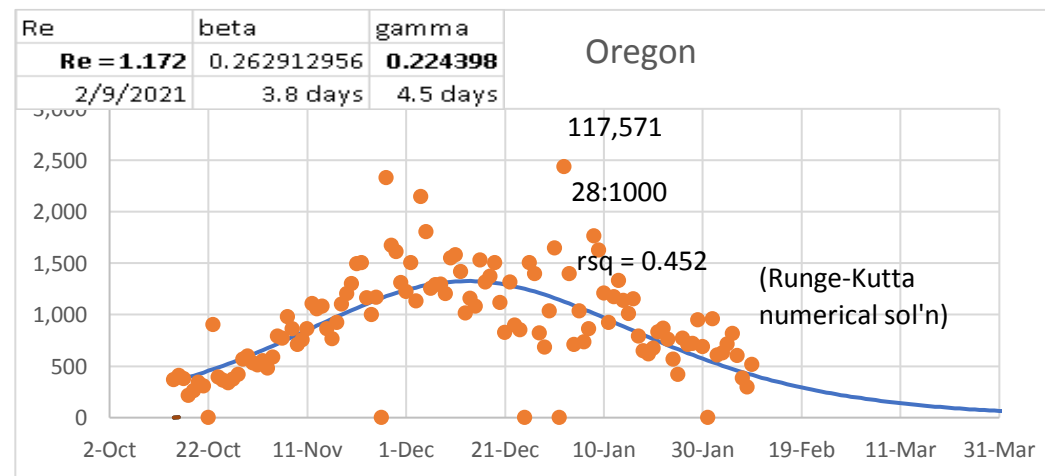
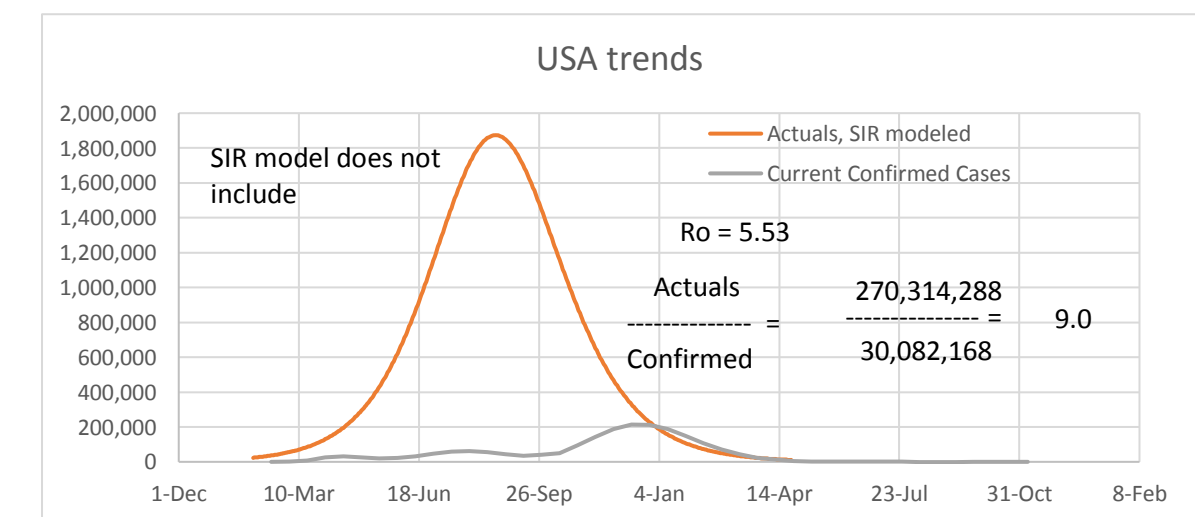
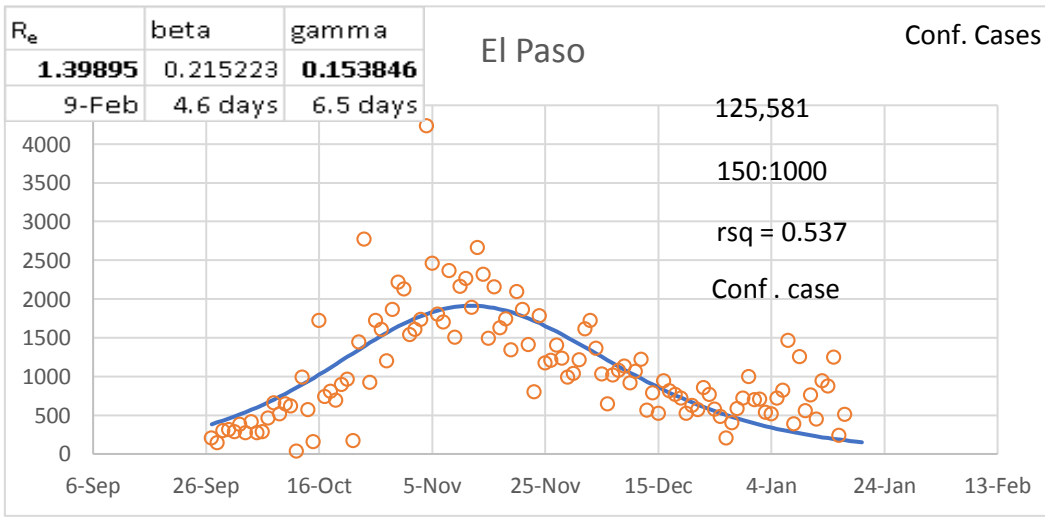
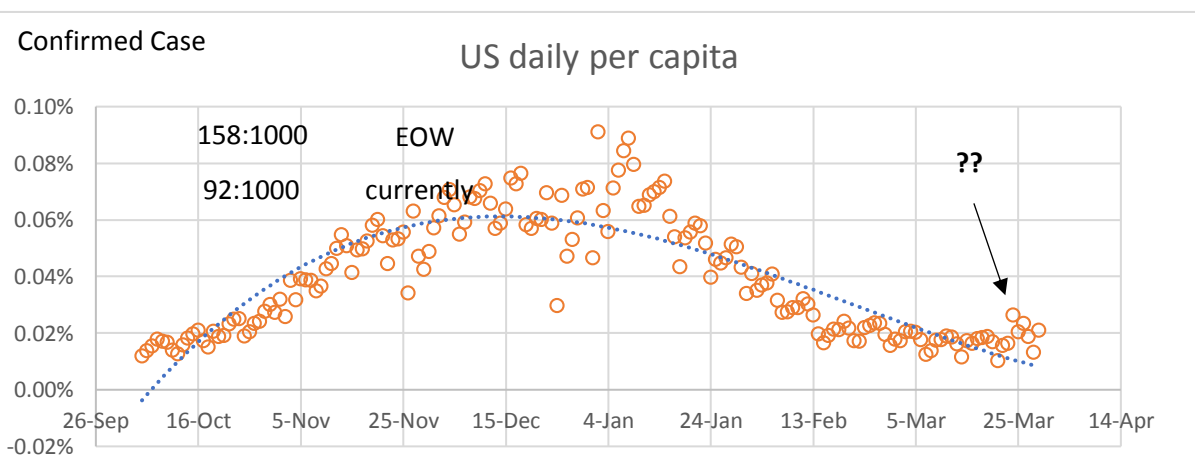
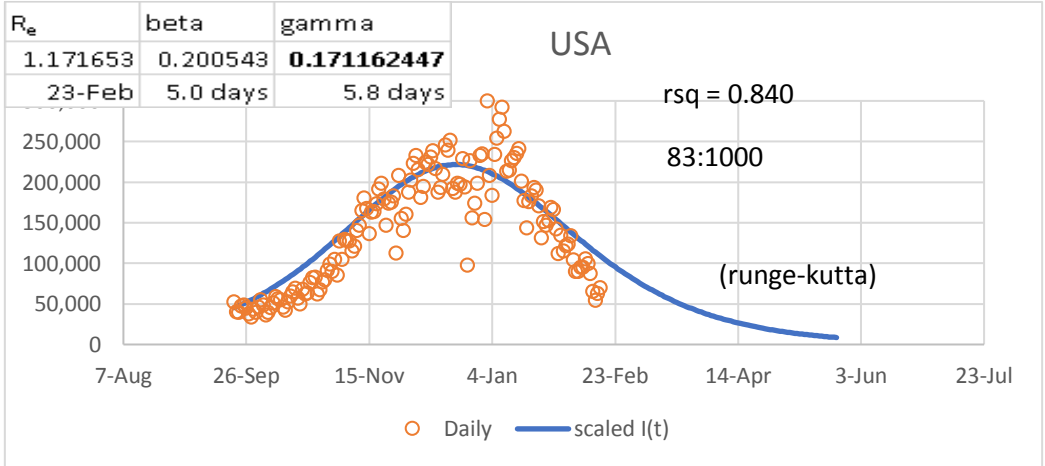
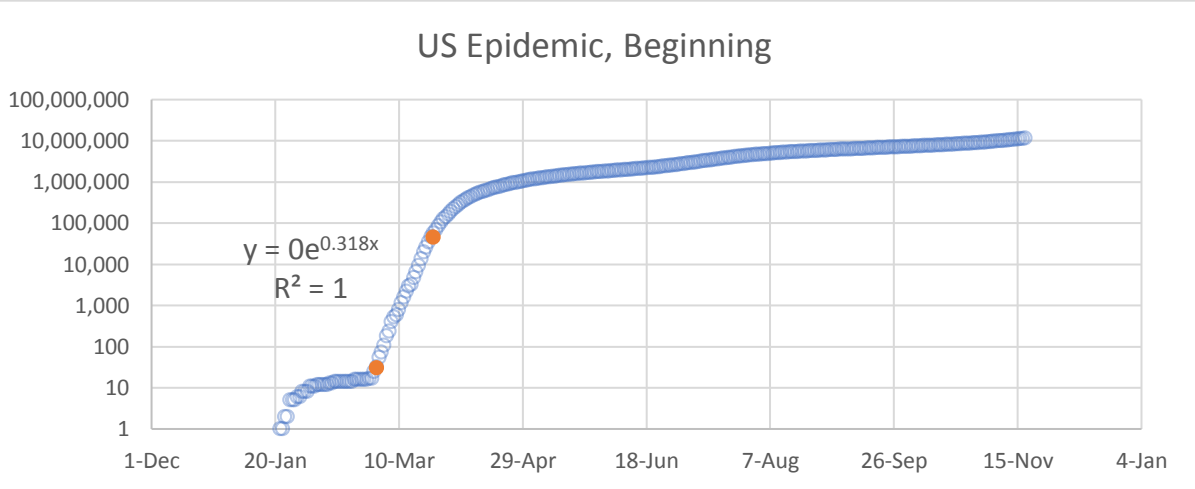
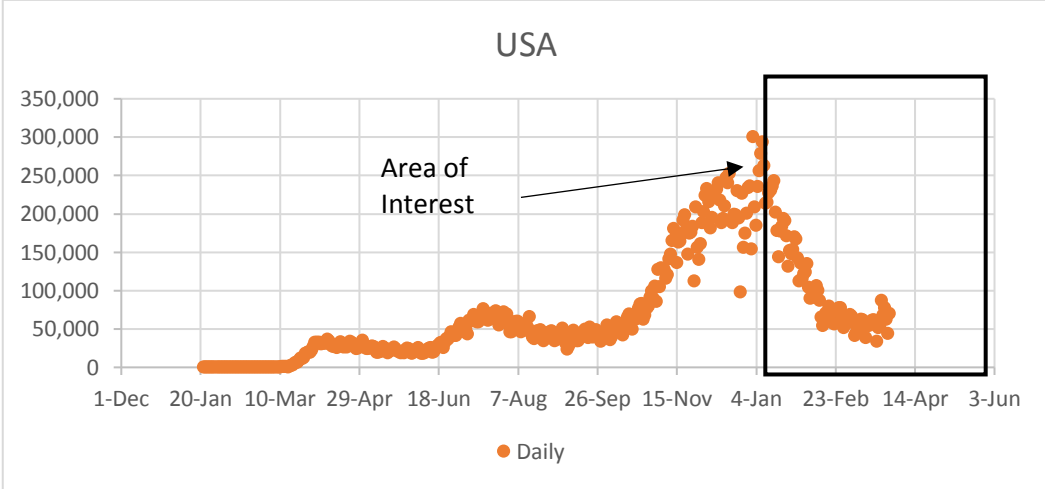
$\gamma = 0.171$   $R_o = \exp(K/\gamma) = 6.42$  84% <= Herd immunity

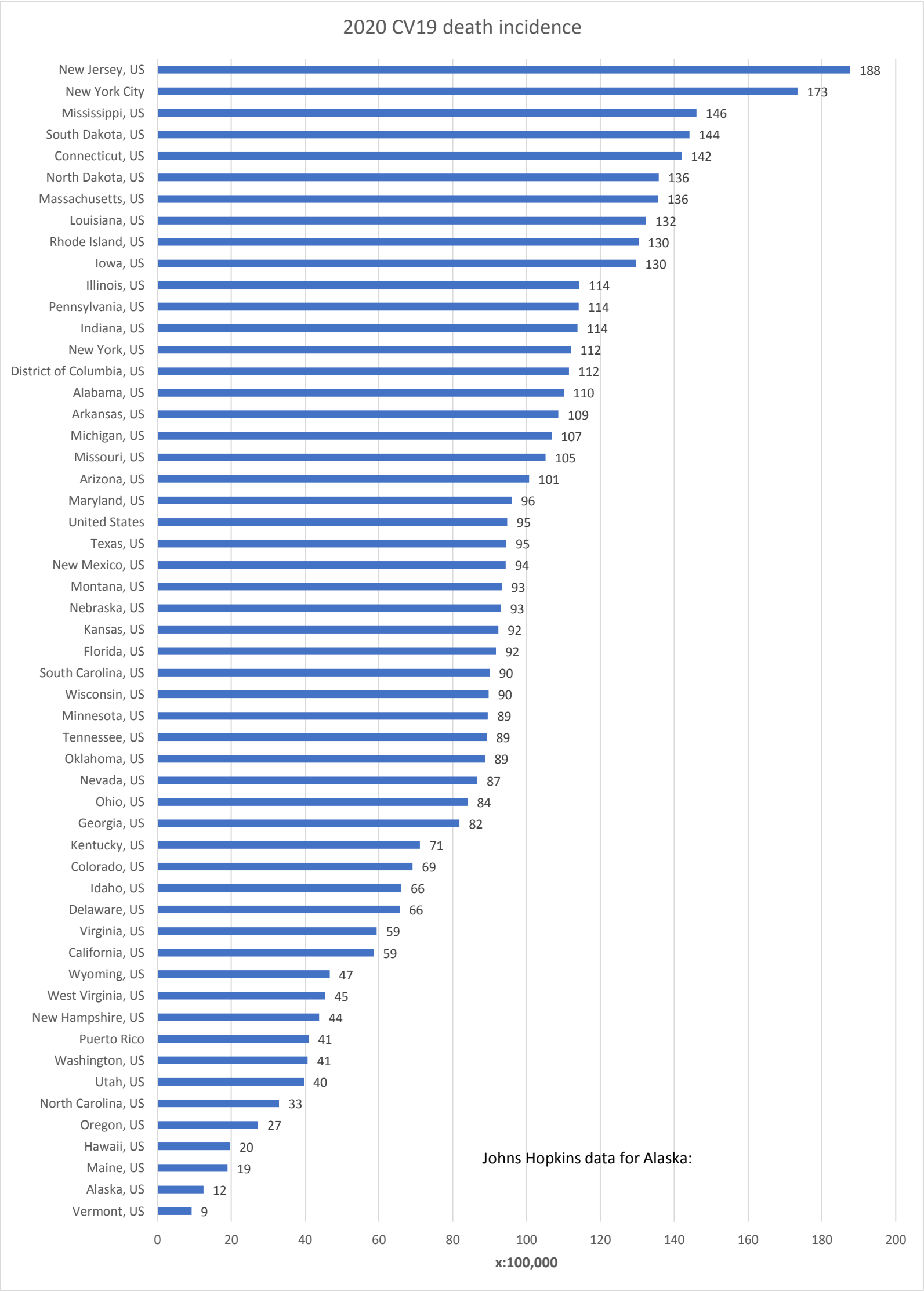
$\gamma = 0.286$   $R > [1 - 1/R_o]/N = 3.04$  67%

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-ite6/data>