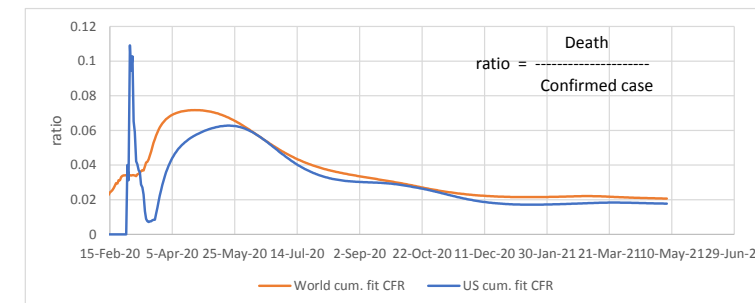
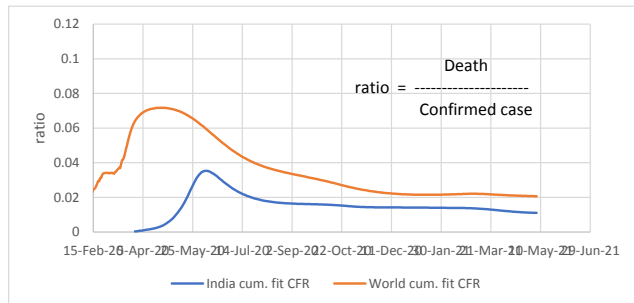
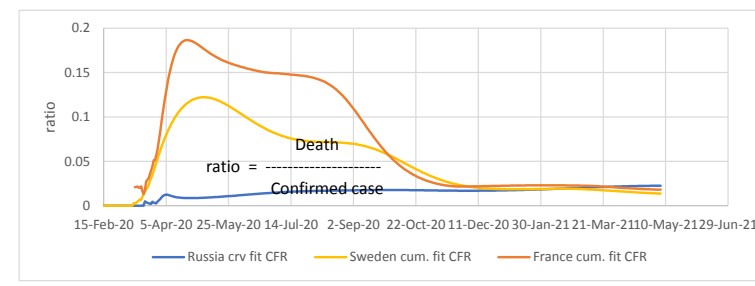
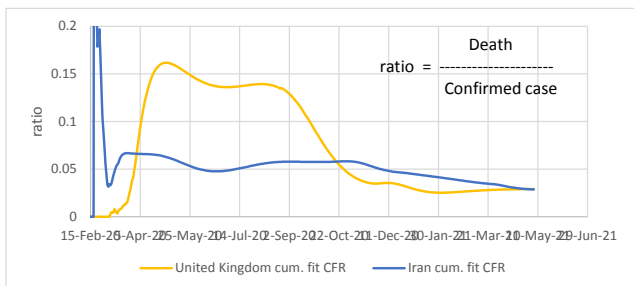
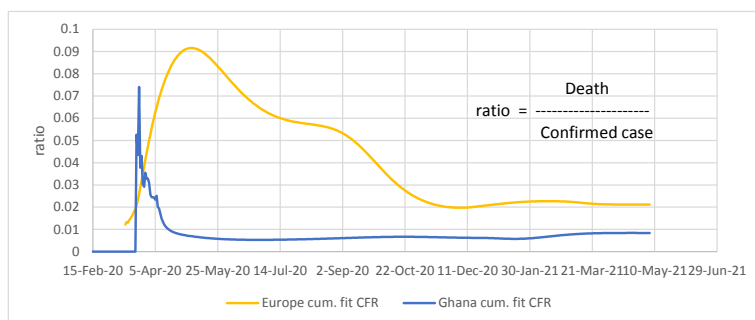
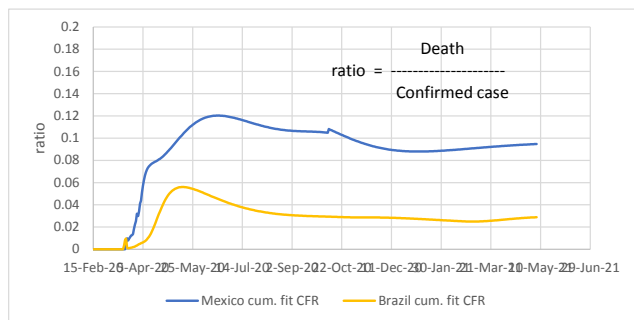
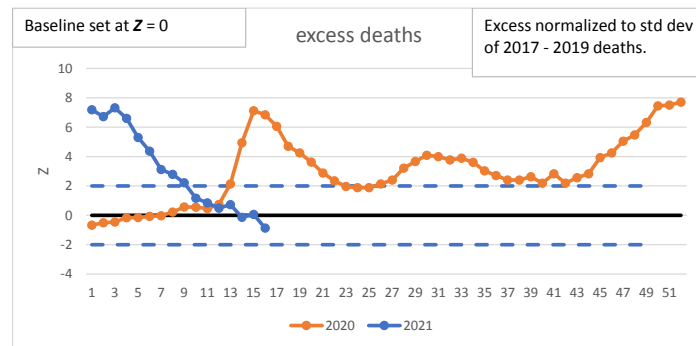


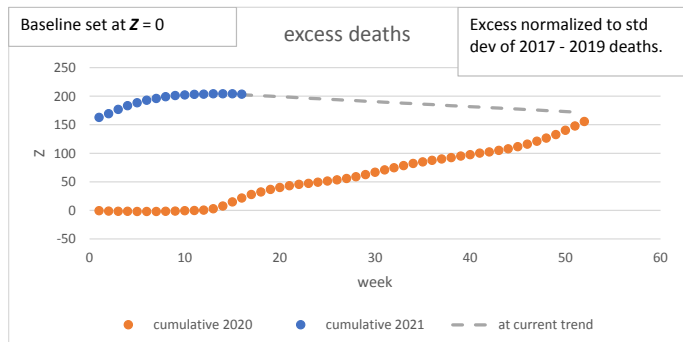
## Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)



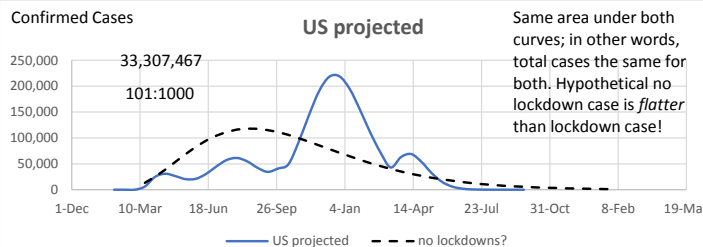
### Excess deaths as a Z score:



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

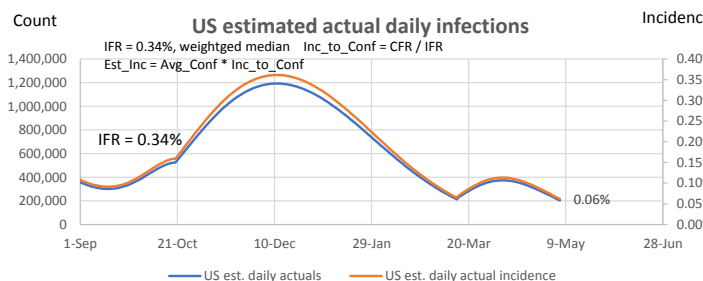


### Confirmed Cases



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

### Count



### False Positives Demonstration

Use 0.06% from US est. incidence above as estimated daily incidence  
Prevalence estimated as avg. infected period of 2 weeks X incidence

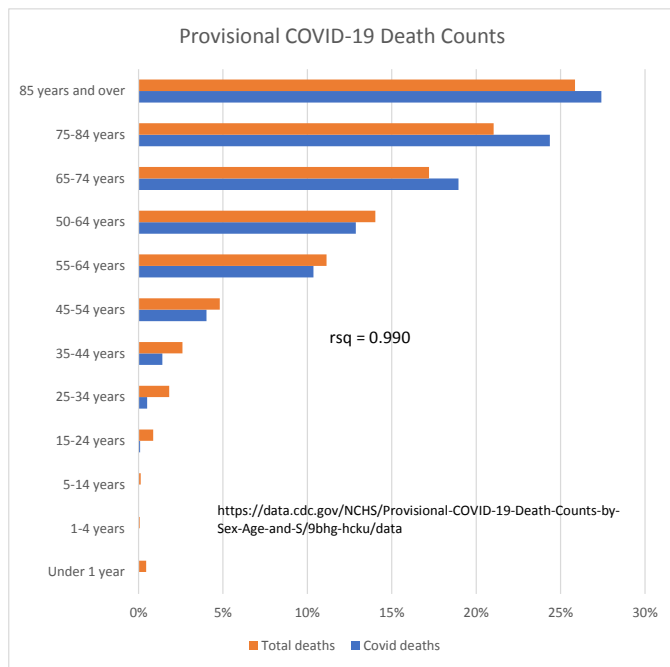
99% accuracy of test 0.06% X 14 = 0.840%

	Positive	Negative	
test pos	0.832%	0.992%	1.82%
test neg	0.008%	98.168%	98.18%
	0.840%	99.160%	100.00%

False pos. is more than half of total positives.

TRUE +	0.832%/1.82%	45.6%
FALSE +	0.992%/1.82%	54.4%
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

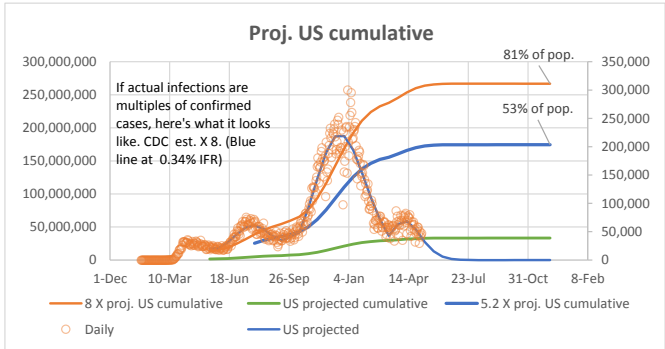
<https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkxf-xrst/data>

$$K = 0.318 \quad R_o : \quad R :$$

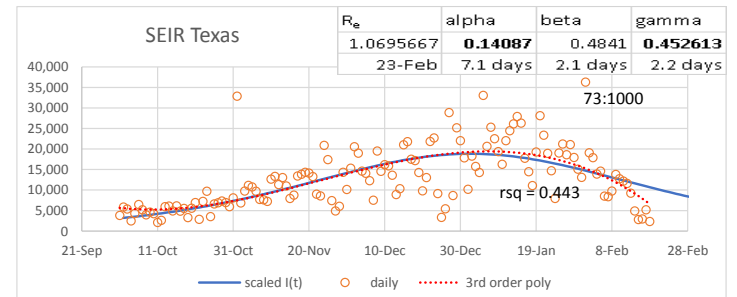
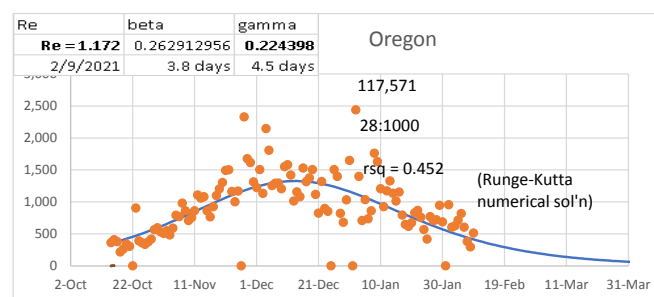
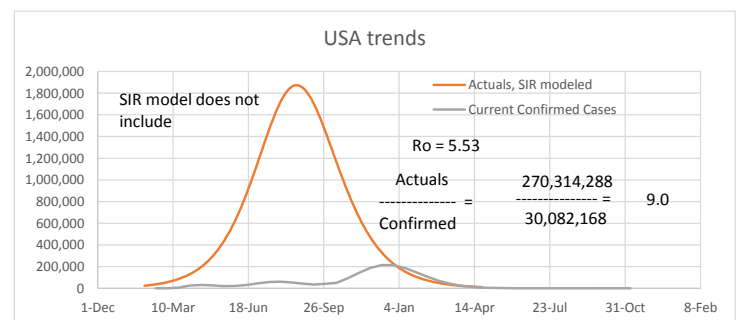
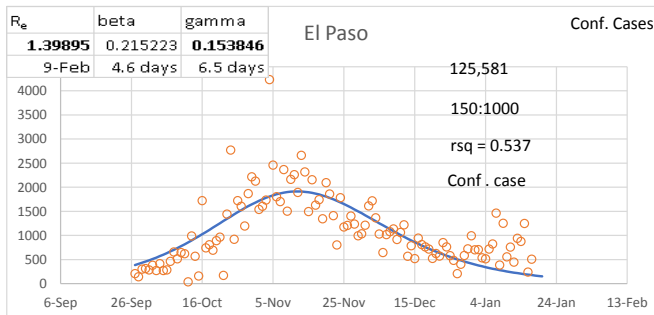
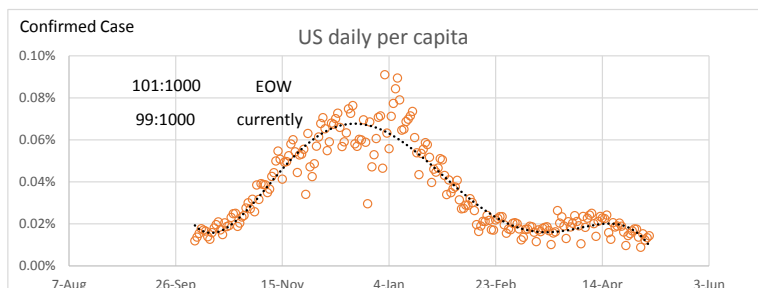
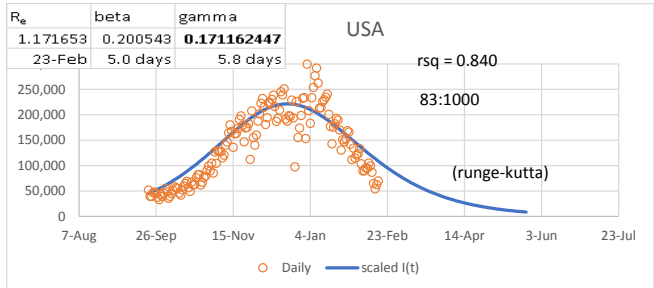
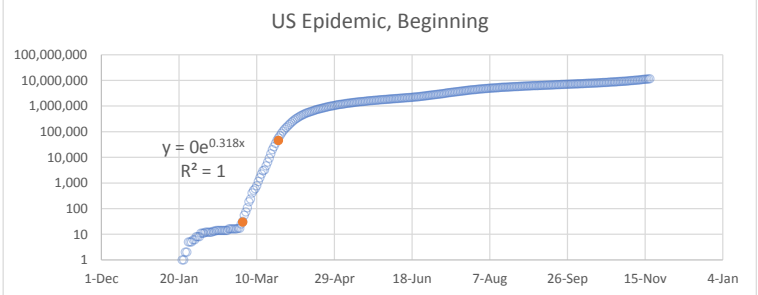
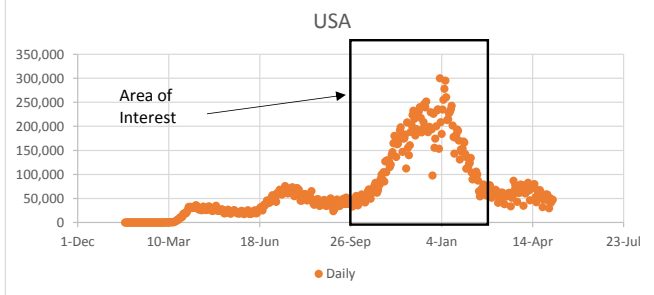
$$\text{gamma} = 0.171 \quad R_o = \exp(K/\text{gamma}) = 6.42 \quad 84\%$$

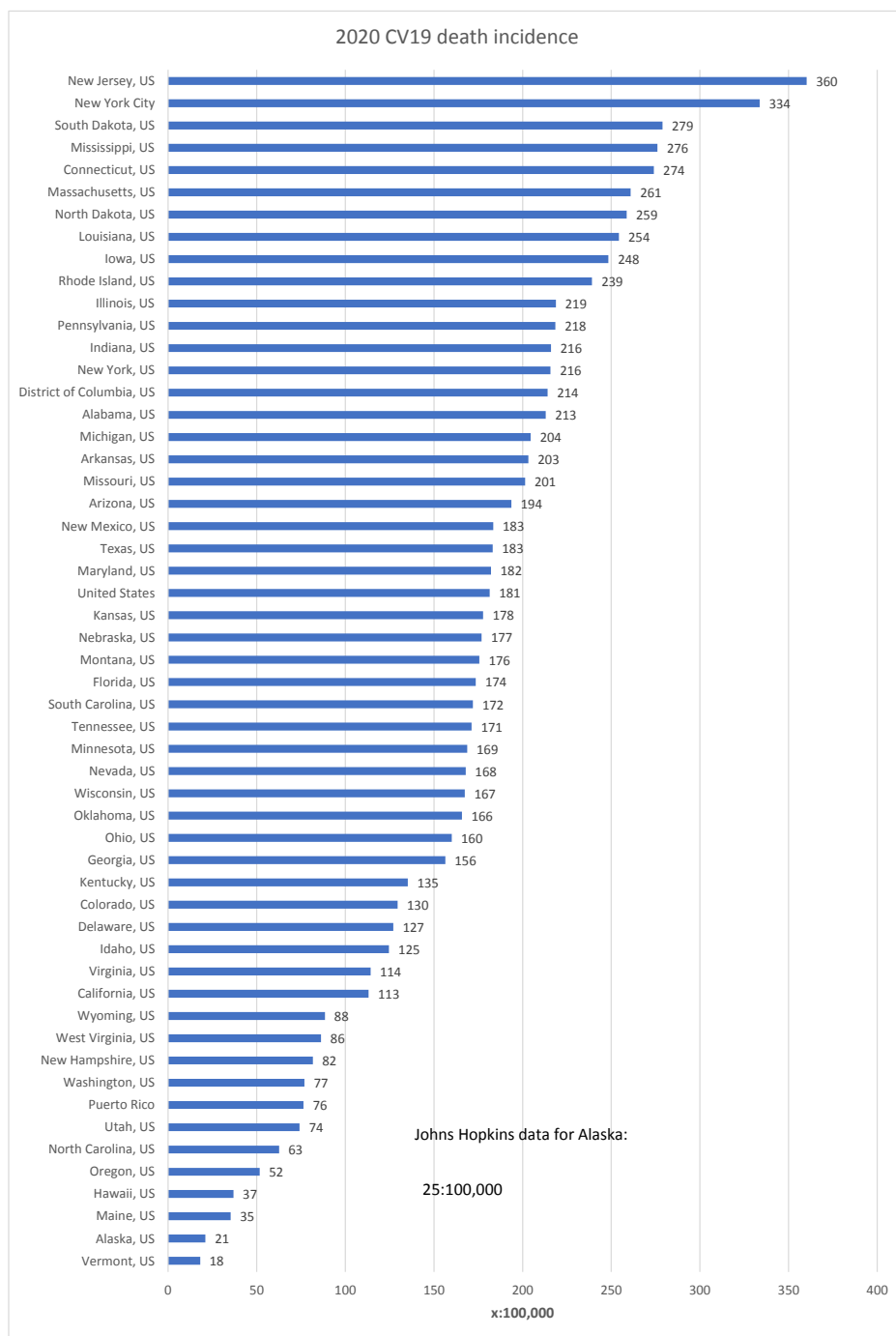
$$\text{gamma} = 0.286 \quad R > 1 - 1/R_o = 3.04 \quad 67\% \quad \leq \text{Herd immunity}$$

R is recovered variable.



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





<https://data.cdc.gov/NCHS/Weekly-Counts-of-Deaths-by-State-and-Select-Causes/muzy-ite6/data>