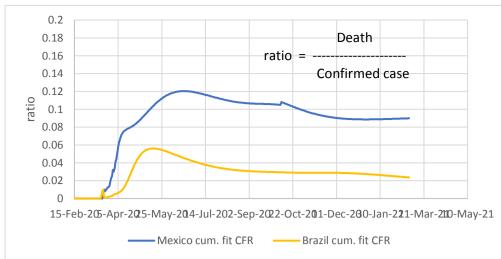
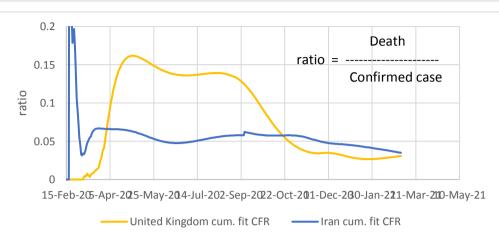
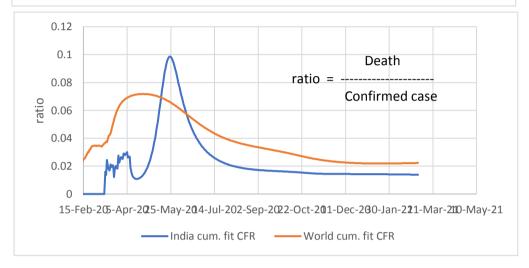
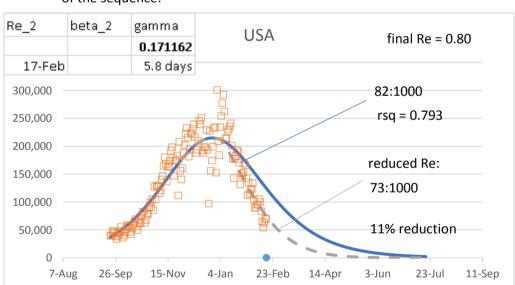
Experimental page: ratios of curve fit deaths to curve fit confirmed cases (CFR)



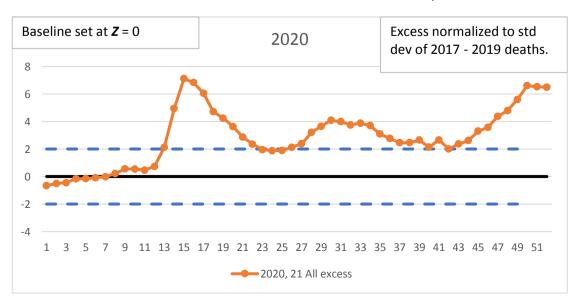


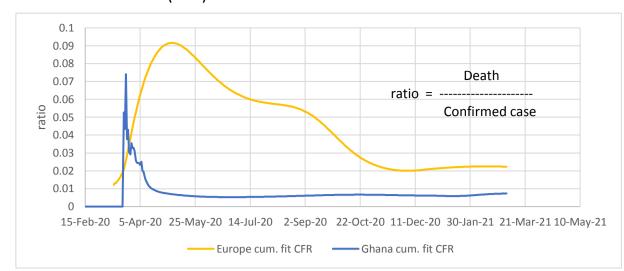


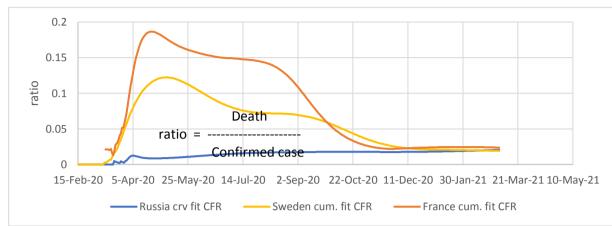
Demonstration of SIR model where R_{e} is linearly reduced to 0.80 at the end of the sequence:

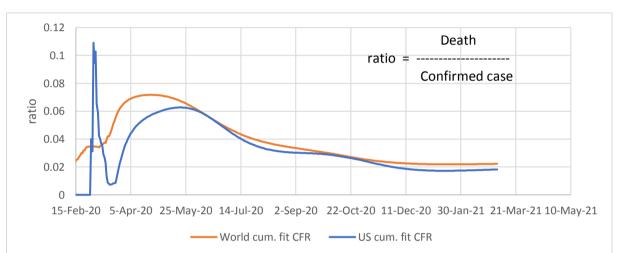


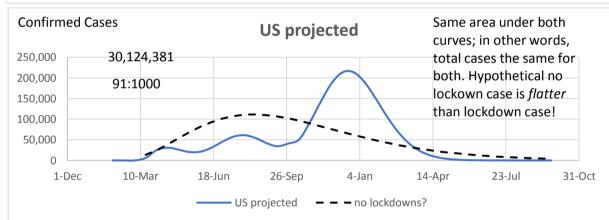
Reducing the R_e while keeping gamma constant is the same as reducing contact rate. Contact rate is reduced through isolation, lockdowns, and vaccinations. Seems to indicate timing of start of measures is a big factor. The orange data taken as without measures, but we know certain measures were taken.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

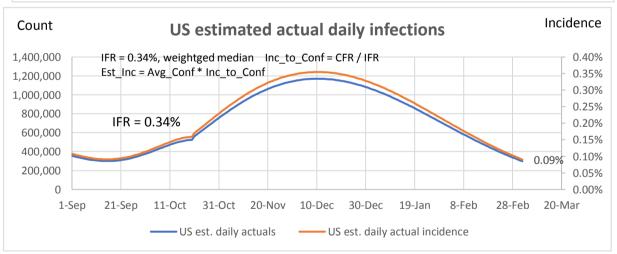












<u>False Positives Demonstration</u>

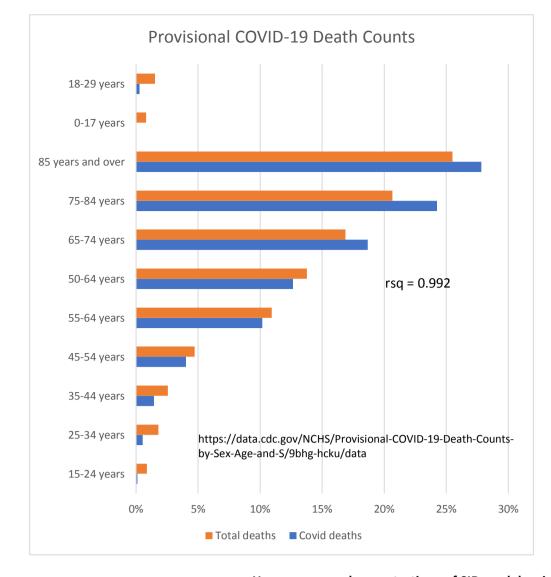
Use 0.09% from US est. incidence above as estimated daily incidence *Prevalence* estimated as avg. infected period of 2 weeks X incidence

	99% accu	accuracy of test			0.09% X 14 = 1.260%
	Posi	itive	Negative		
test pos	1	L. 247 %	0.987%	2.23%	
test neg	C	0.013%	97.753%	<u>97.77%</u>	
	1	260%	98.740%	100.00%	

False pos. is more than a 1/3 of total positives.

Total		100.00%
FALSE +	0.987%/2.23%	<u>44.2%</u>
TRUE +	1.247%/2.23%	55.8%

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

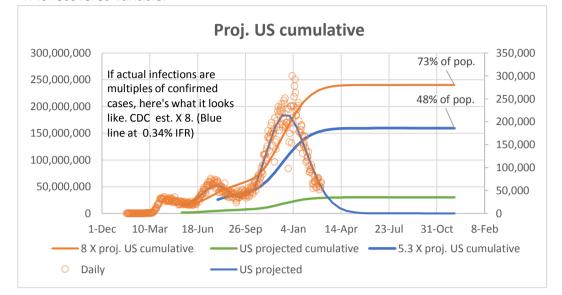
27% of All-Cause excess deaths are non-CV19

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

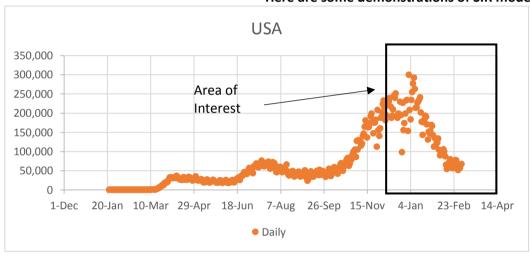
K = 0.318

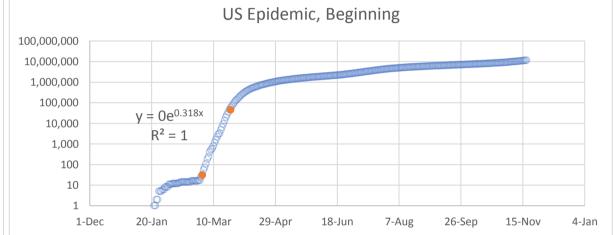
gamma = 0.171 $R_o = \exp(K/\text{gamma}) = 6.42$ gamma = 0.286 $R > [1-1/R_0]/N = 3.04$ 84% <=Herd immunity

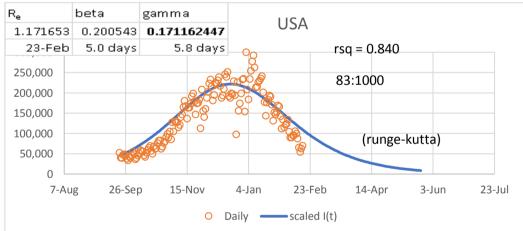
R is recovered variable.

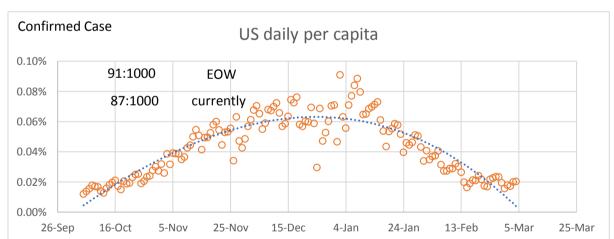


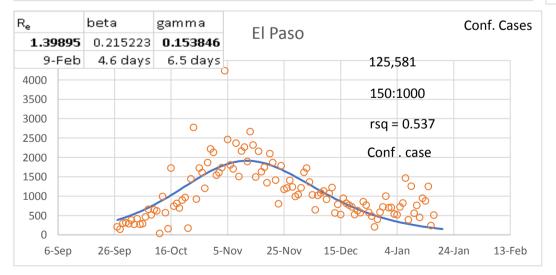
Here are some demonstrations of SIR model, using $R_{\rm e}$, gamma, and beta

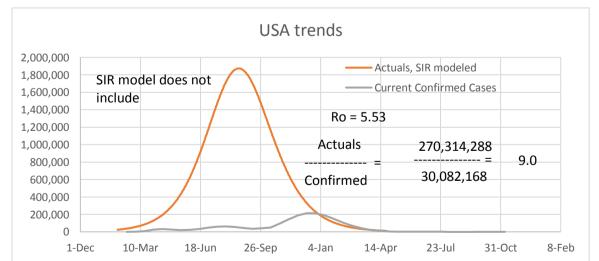


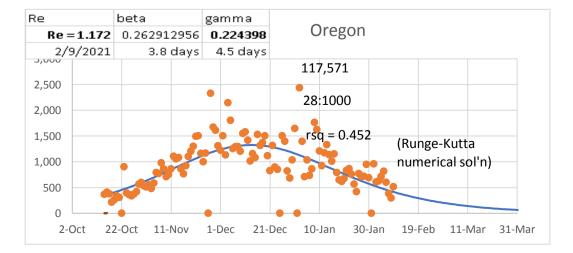


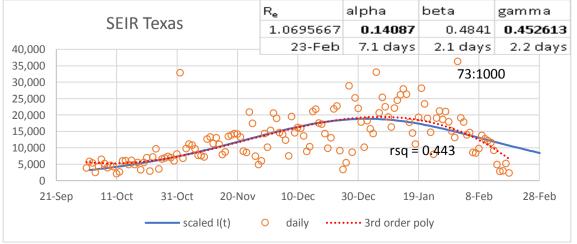


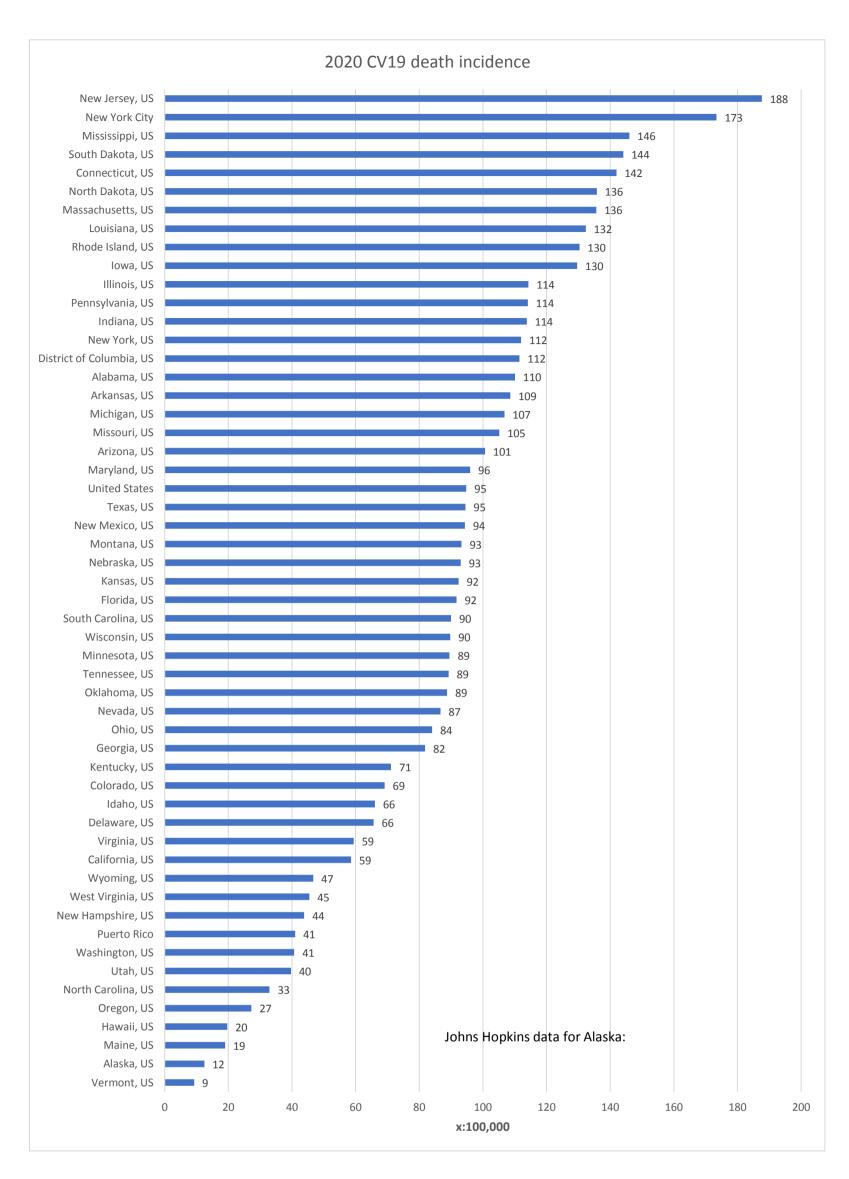












https://data.cdc.gov/NCHS/Weekly-Counts-of-Deaths-by-State-and-Select-Causes/muzy-jte6/data