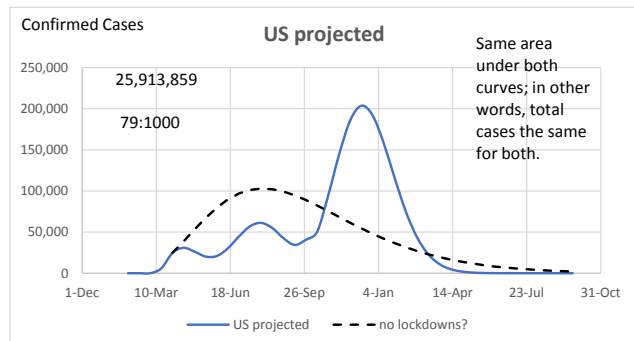
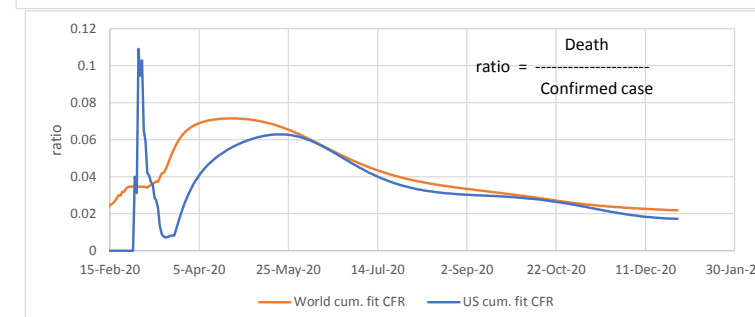
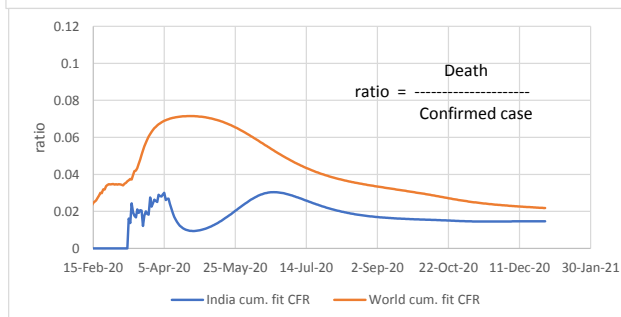
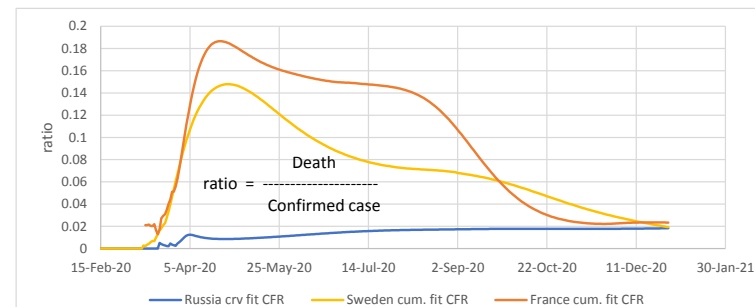
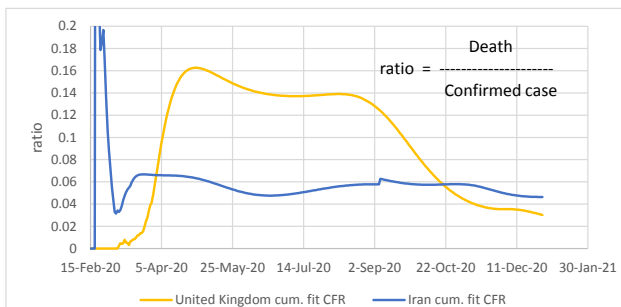
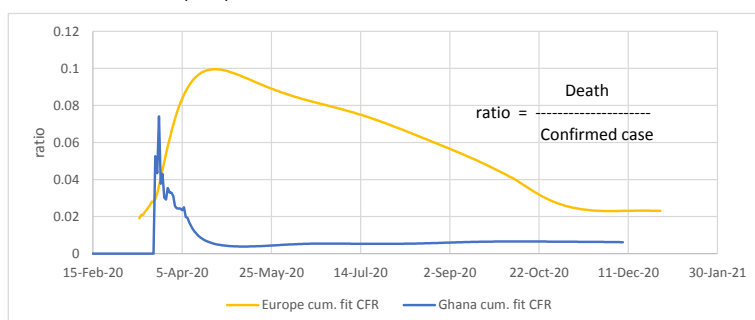
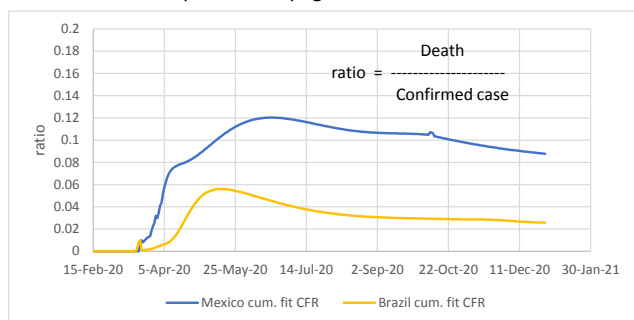
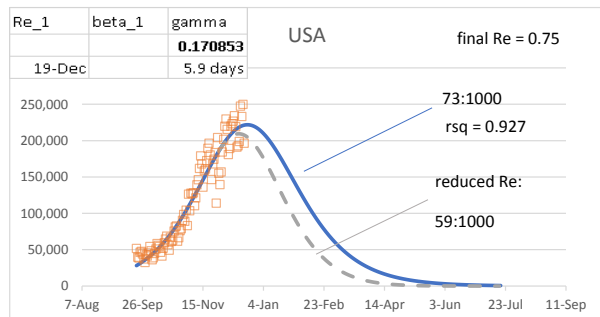


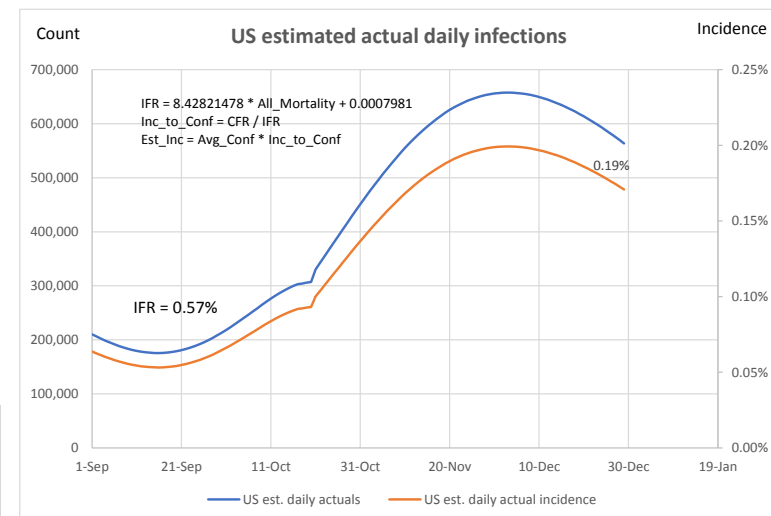
Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)



Demonstration of SIR model where R_e is linearly reduced to 0.75 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. This case about 14:1000 benefit (19%).



False Positives Demonstration

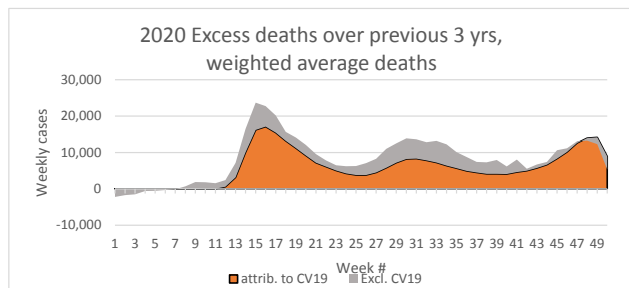
Use 0.19% from US est. incidence above as estimated daily incidence
Prevalence estimated as avg. infected period of 2 weeks X incidence

99% accuracy of test		
Positive	Negative	
test pos	2.633%	0.973%
test neg	0.027%	96.367%
2.660%		97.340%
		100.00%

False pos. is a bit over 1/4 of total positives!

TRUE +	2.633%/3.61%	73.0%
FALSE +	0.973%/3.61%	27.0%
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 50 weeks

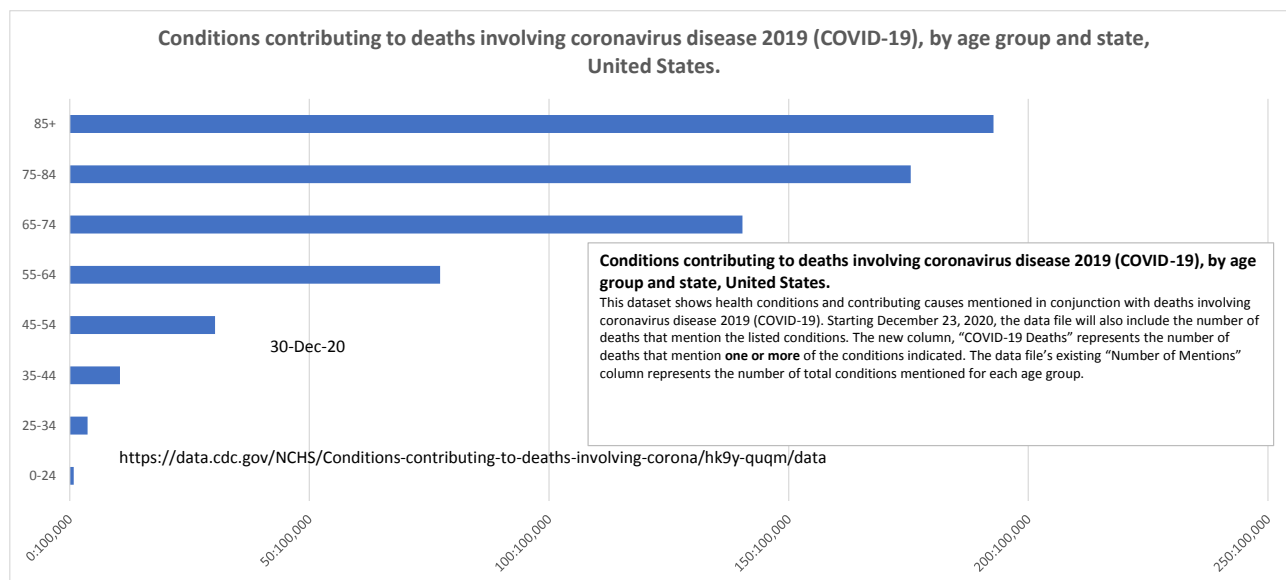
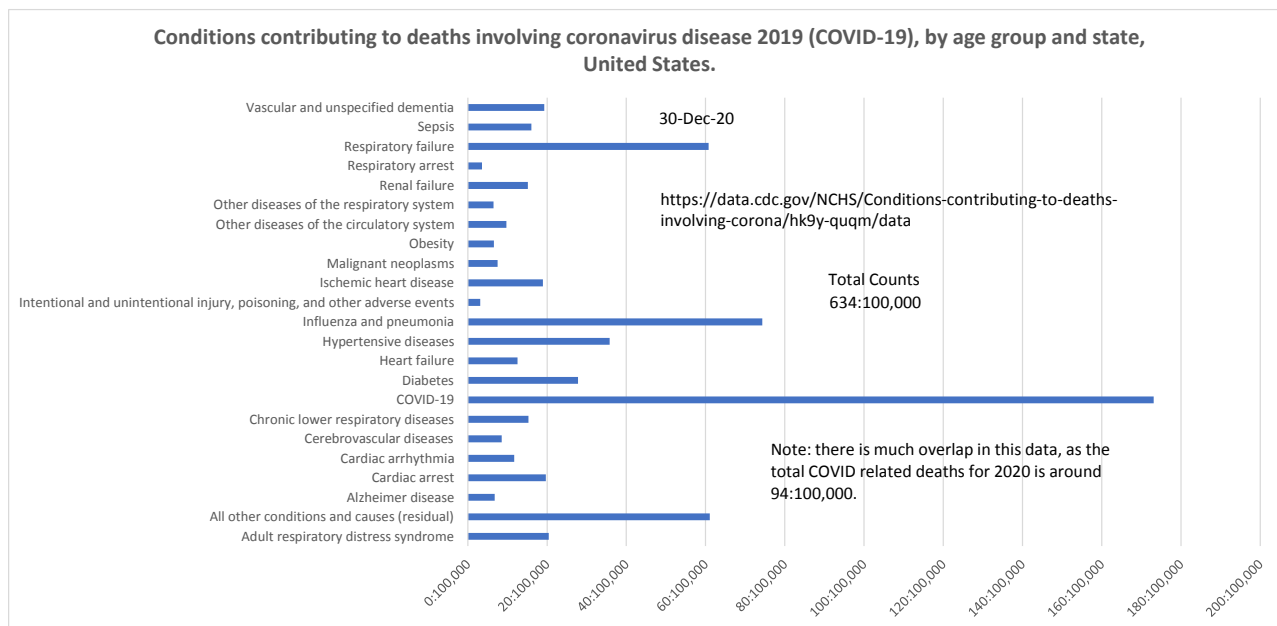
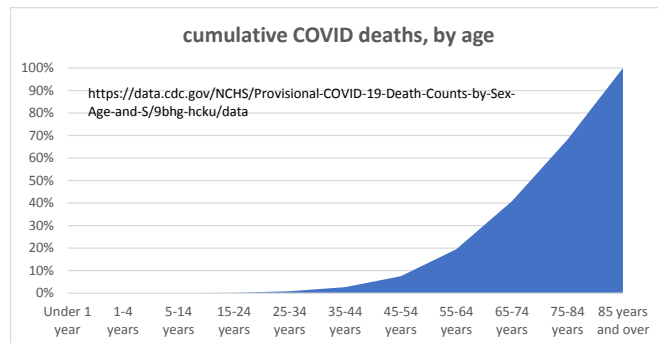
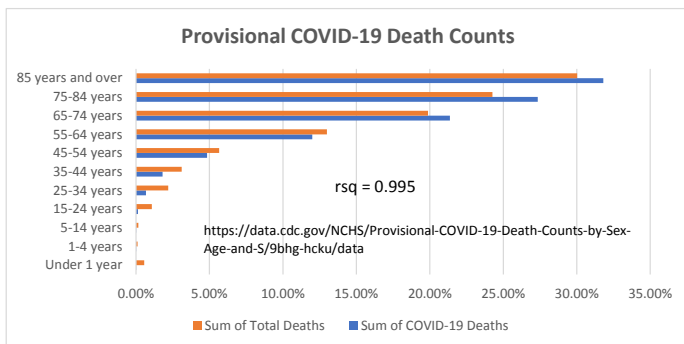
	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	857:100,000	857:100,000	-
2020	988:100,000	893:100,000	-
Diff.	131:100,000	37:100,000	94:100,000
Diff.	+15.3%	+4.3%	+11.0%

3 yr average weighted

859:100,000

28% of All-Cause excess deaths are non-CV19

$$\begin{aligned} \gamma &= 0.171 & K &= 0.318 & \gamma &= 0.286 \\ R_o &= \exp(K/\gamma) & &= 6.421 & & 221,571,317 \\ R &> [1 - 1/R_o] / N & & R > & & 278,610,004 \leq \text{Herd immunity} \end{aligned}$$



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

