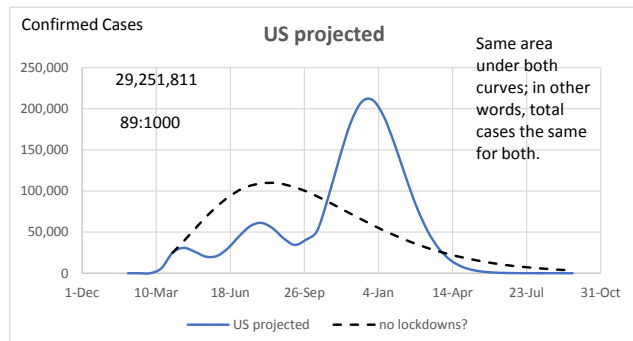
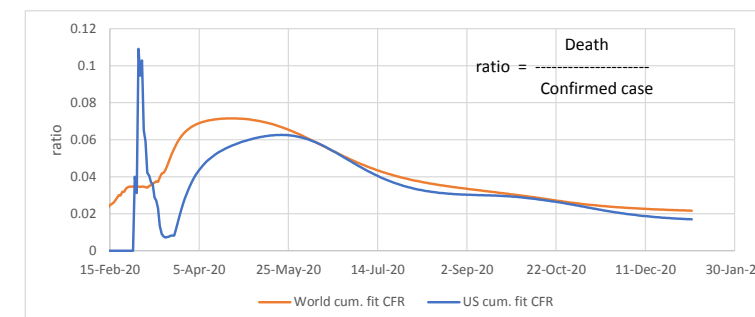
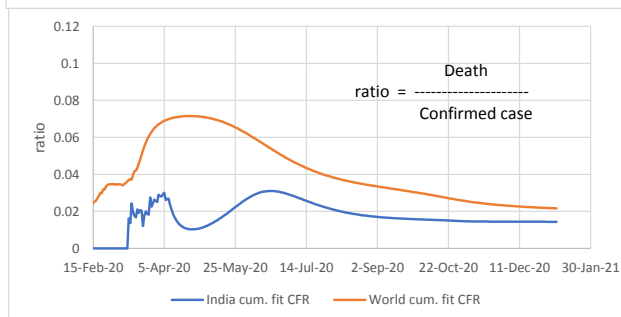
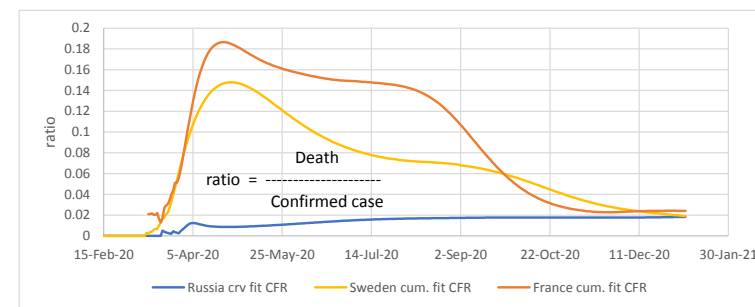
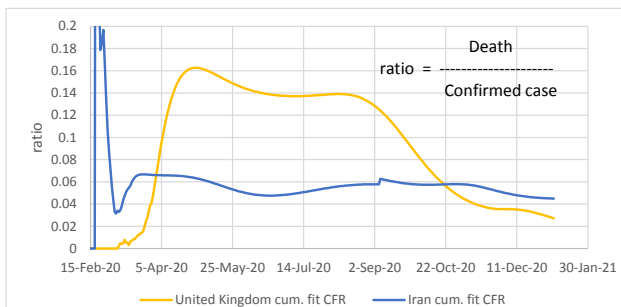
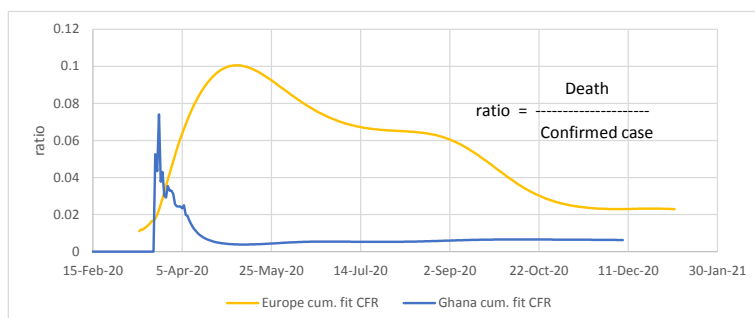
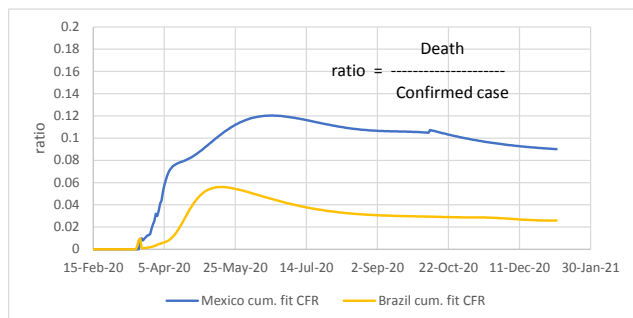
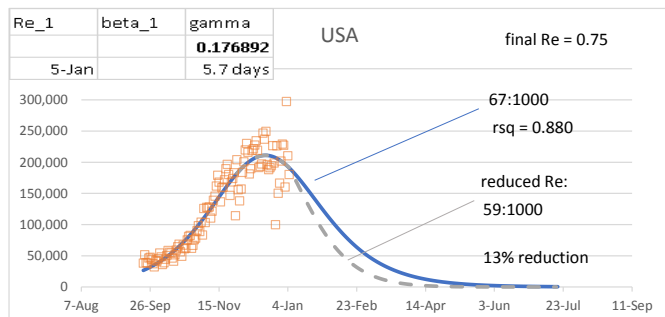


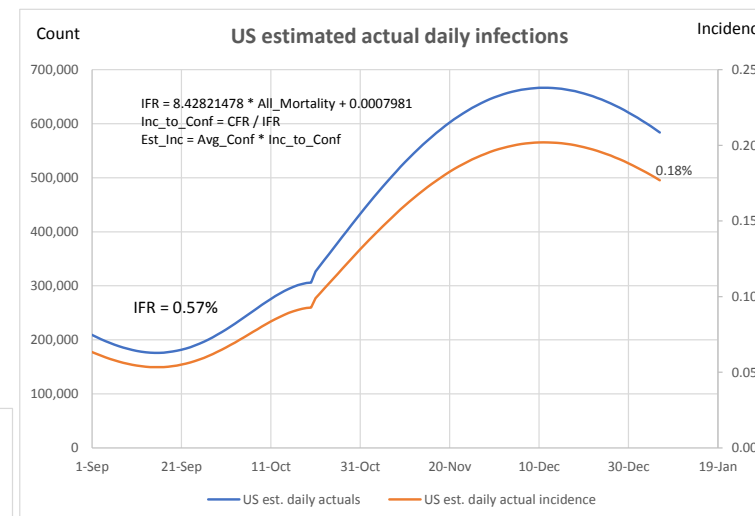
Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)



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.



False Positives Demonstration

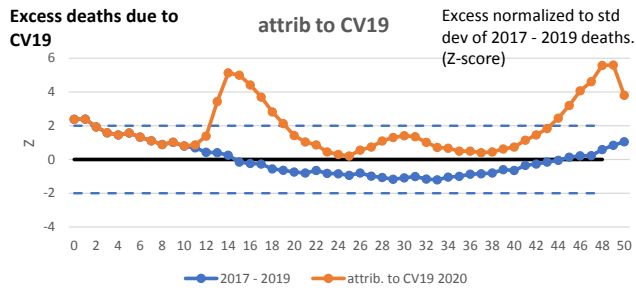
Use 0.18% from US est. incidence above as estimated daily incidence
Prevalence estimated as avg. infected period of 2 weeks X incidence

	99% accuracy of test		0.18% X 14 = 2.520%
	Positive	Negative	
test pos	2.495%	0.975%	3.47%
test neg	0.025%	96.505%	96.53%
	2.520%	97.480%	100.00%

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

TRUE +	2.495%/3.47%	71.9%
FALSE +	0.975%/3.47%	<u>28.1%</u>
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	Weeks are labelled 0 thru 51		
	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	859:100,000	876:100,000	-
2020	1009:100,000	909:100,000	-
Diff.	133:100,000	34:100,000	99:100,000

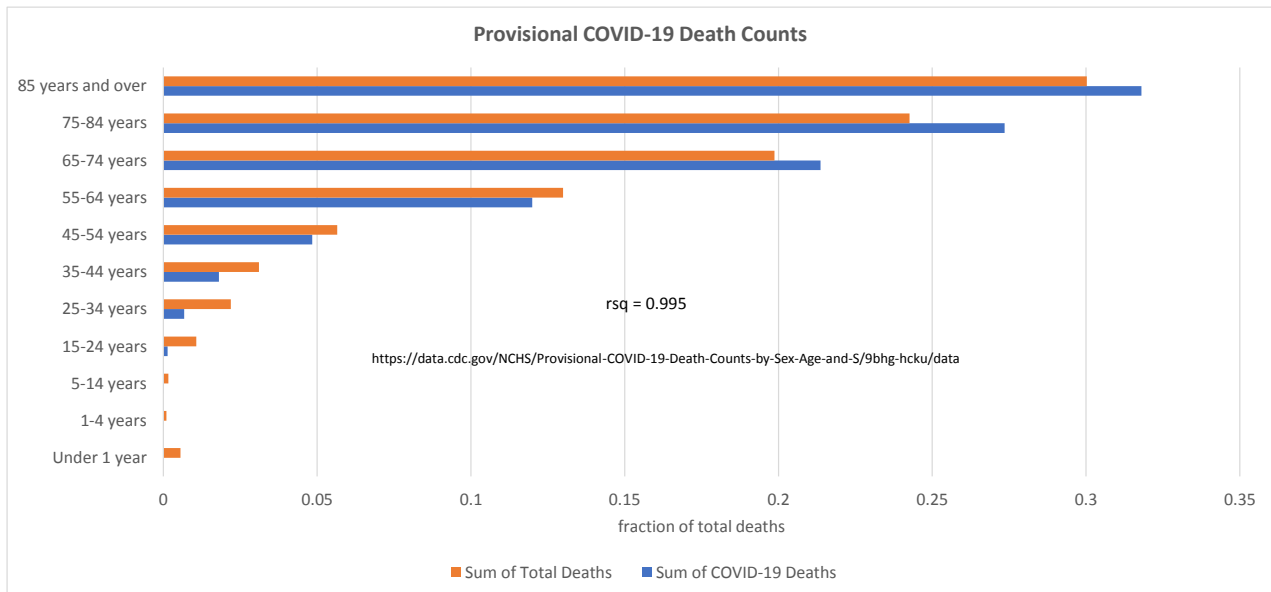
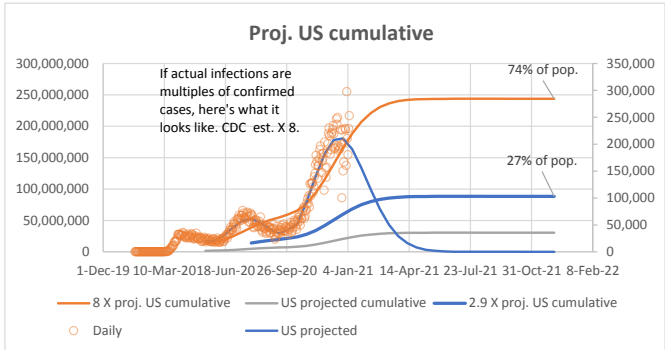
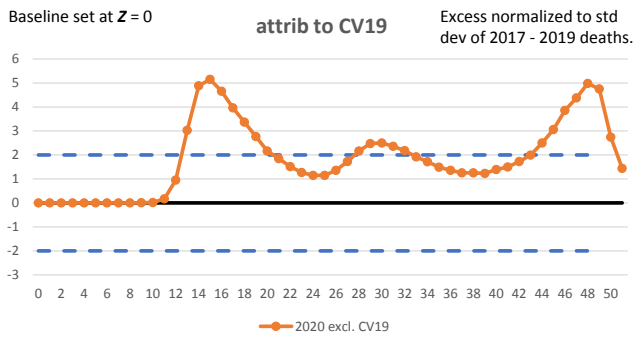
3 yr average
859:100,000

26% of All-Cause excess deaths are non-CV19

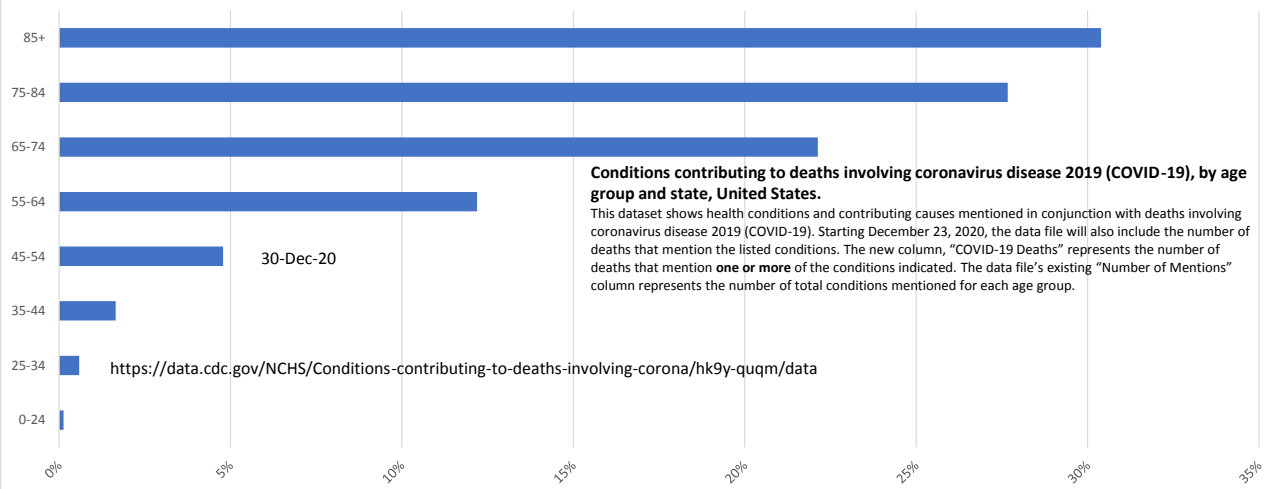
<https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkxf-xrst/data>

$$\begin{aligned} K &= 0.318 \\ \gamma &= 0.171 \quad R_o = \exp(K/\gamma) = 6.421 \\ \gamma &= 0.286 \quad R > [1 - 1/R_o]/N = 3.043475 \end{aligned}$$

84% <= Herd immunity
67%



Conditions contributing to deaths involving coronavirus disease 2019 (COVID-19), by age group and state, United States.



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

