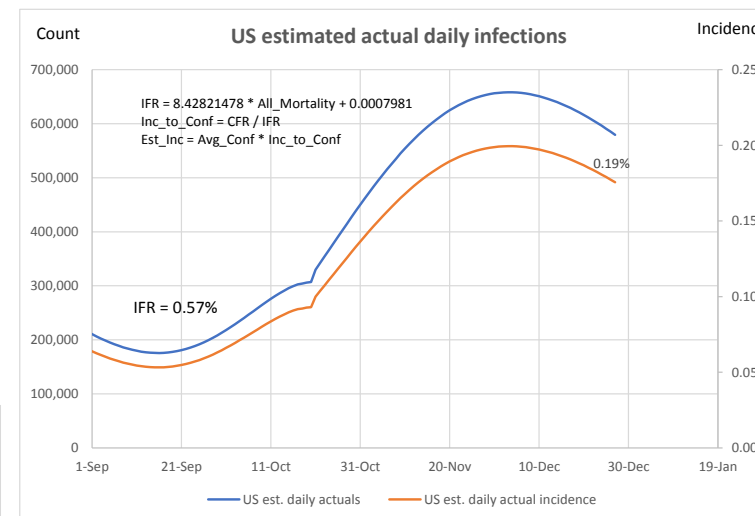
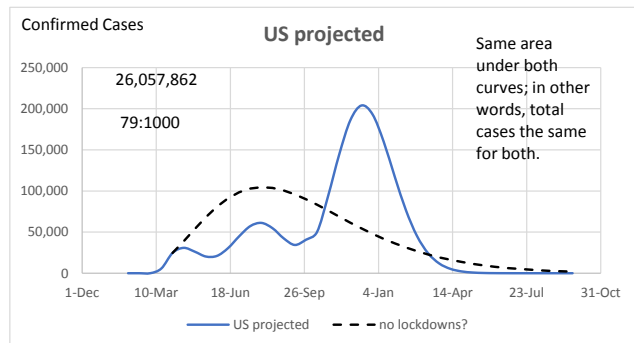
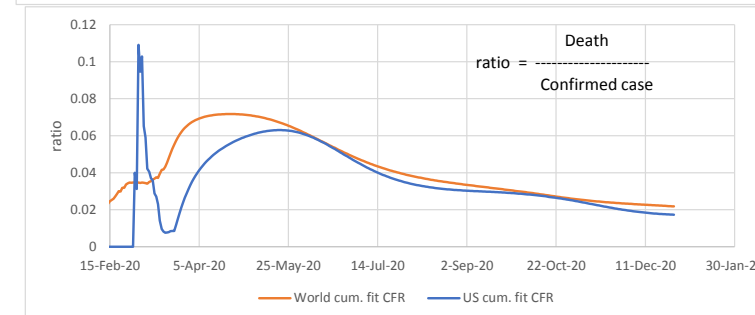
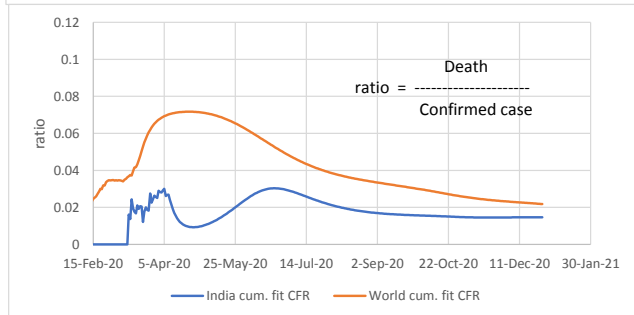
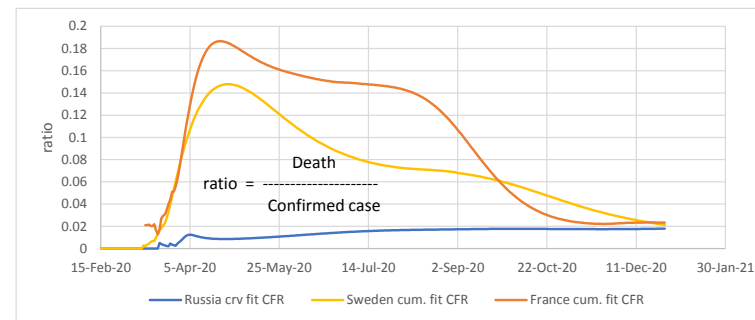
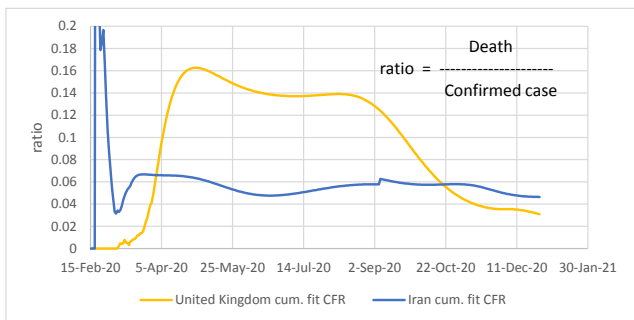
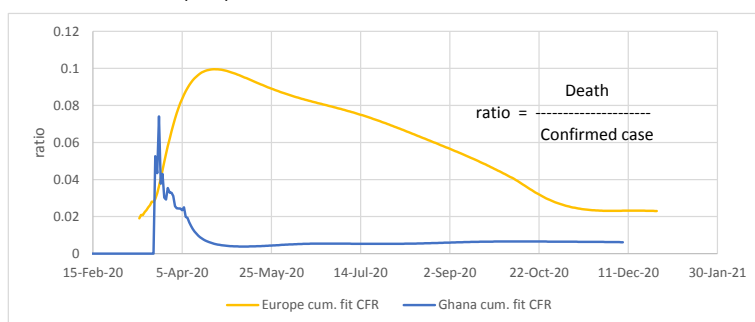
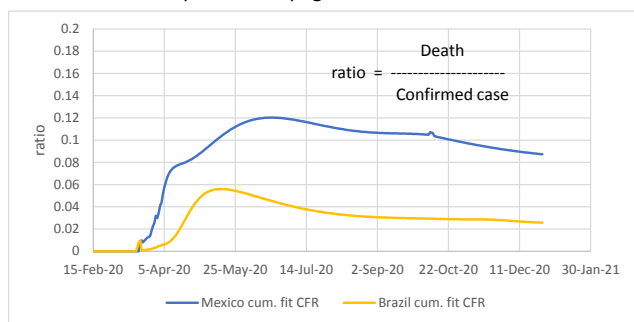
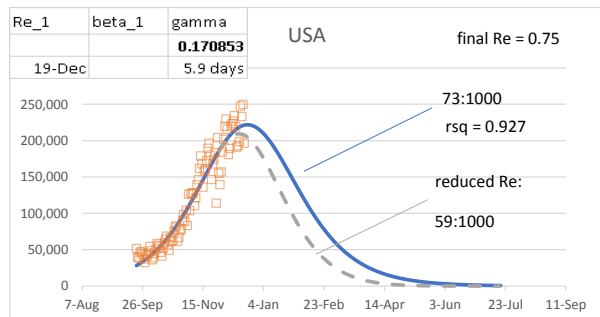


# Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)



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

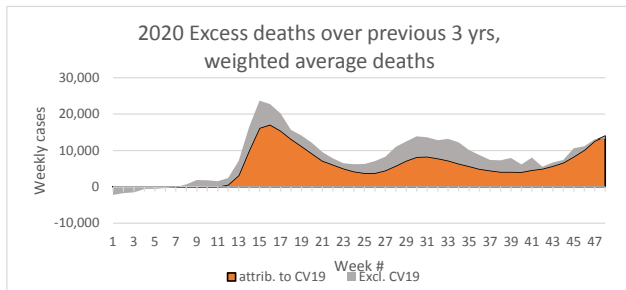
0.19% X 14 = 2.660%

	Positive	Negative	
test pos	2.633%	0.973%	3.61%
test neg	0.027%	96.367%	96.39%
	2.660%	97.340%	100.00%

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

	TRUE +	FALSE +
	2.633%/3.61%	73.0%
	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.



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

#### 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

gamma = 0.171

$K = 0.318$

gamma=0.286

$R_o = \exp(K/\text{gamma})$

= 6.421

221,571,317

$R > [1 - 1/R_o] / N$

$R >$

278,610,004

<=Herd immunity

