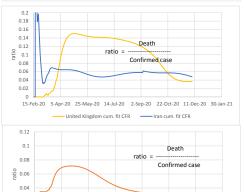
## Experimental page: ratios of curve fit deaths to curve fit confirmed cases (CFR)

0.16

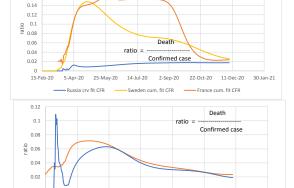
15-Feb-20





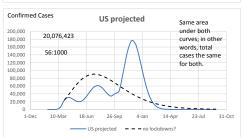


0.02



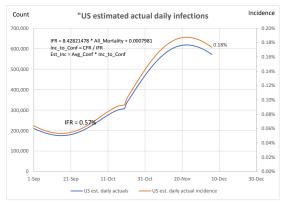
2-Sep-20 22-Oct-20 11-Dec-20

25-May-20 14-Jul-20



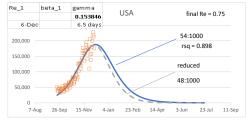
15-Feb-20 5-Apr-20 25-May-20 14-Jul-20 2-Sep-20 22-Oct-20 11-Dec-20 30-Jan-21

India cum. fit CFR ——World cum. fit CFR



--- World cum. fit CFR --- US cum. fit CFR

Demonstration of SIR model where  $R_{\, e}$  is linearly reduced to 0.75 at the end of the sequence:



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 0.1

| Positive | Negative |
| test pos 2.495% 0.975% |
| test neg 0.025% 96.505% 96.53% |
| 2.520% 97.480% 100.00%

False pos. is nearly 1/3 of total positives!

TRUE + 2.495%/3.47%

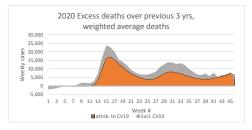
FALSE + 0.975%/3.47%

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.

71.9%

28.1%

Reducing the  $R_e$  while keeping gamma constant is the same as reducing contact rate. Contact rate is reduced through isolation, lockdowns, and vaccinations. Doesn't make much difference in this case, though.



## USA Excess Deaths (from CDC data):

Annualized on 46 weeks

	All Cause	All Cause, excl.	CV19
3 yr average before 2020	854:100,000	854:100,000	-
2020	977:100,000	893:100,000	-
Diff.	122:100,000	39:100,000	84:100,000

## Here are some demonstrations of SIR model, using R<sub>e</sub>, gamma, and beta

