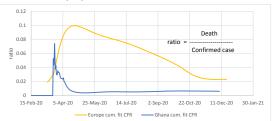
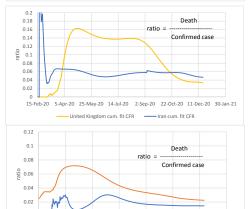
Experimental page: ratios of curve fit deaths to curve fit confirmed cases (CFR)

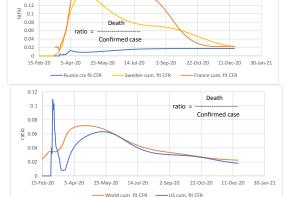
0.18

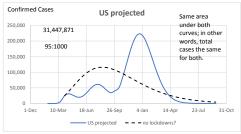
0.16





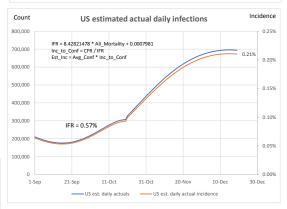




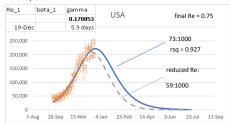


15-Feb-20 5-Apr-20 25-May-20 14-Jul-20 2-Sep-20 22-Oct-20 11-Dec-20 30-Jan-21

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



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



False Positives Demonstration

Use 0.21% from US est. incidence above as estimated daily incidence Prevalence estimated as avg. infected period of 2 weeks X incidence

 99% accuracy of test
 0.21% X

 Positive
 Negative

 test pos
 2.911%
 0.971%

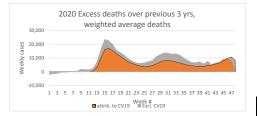
 test neg
 0.029%
 96.089%
 96.12%

 2.940%
 97.060%
 100.00%

| False pos. is | a bit over 1/4 of total positives! | |
|---------------|------------------------------------|-------|
| TRUE + | 2.911%/3.88% | 75.09 |
| FALSE + | 0.971%/3.88% | 25.09 |

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.

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%).



USA Excess Deaths (from CDC data):

Annualized on 48 weeks

| Allitualized on 48 weeks | | | | |
|--------------------------|-------------|-----------------------|------------|--|
| | All Cause | All Cause, excl. CV19 | CV19 | |
| 3 yr average before 2020 | 855:100,000 | 855:100,000 | - | |
| 2020 | 978:100,000 | 890:100,000 | - | |
| Diff. | 123:100,000 | 35:100,000 | 88:100,000 | |
| Diff | +14.4% | +4.1% | +10.3% | |

3 yr average weighted 859:100,000

29% of All-Cause excess deaths are non-CV19

Here are some demonstrations of SIR model, using $\mathbf{R}_{\mathrm{e}},$ gamma, and beta

