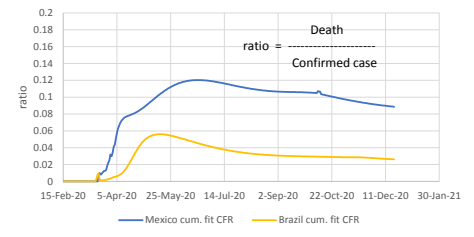
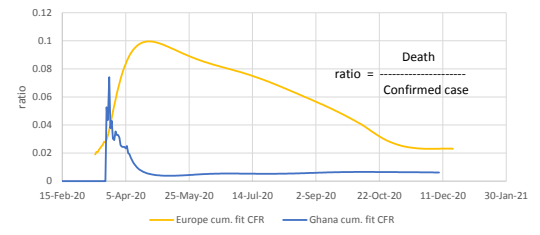
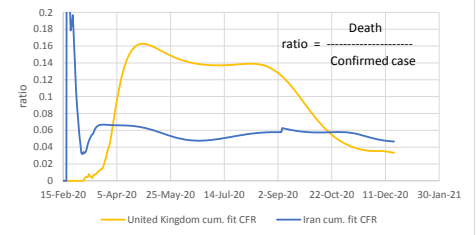
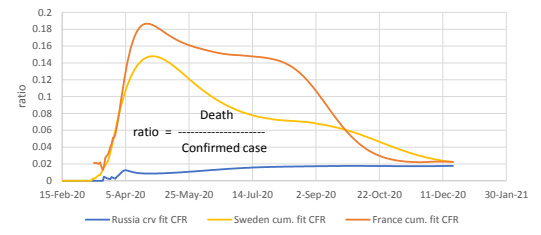
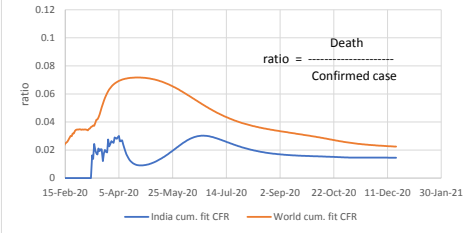
Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

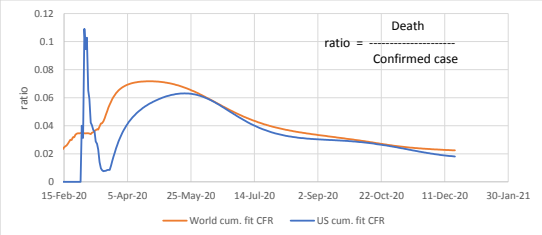


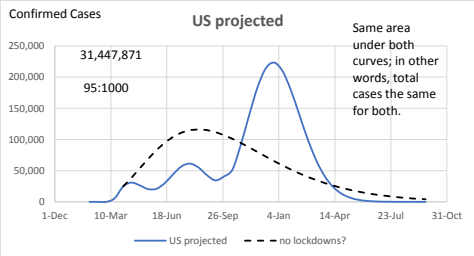


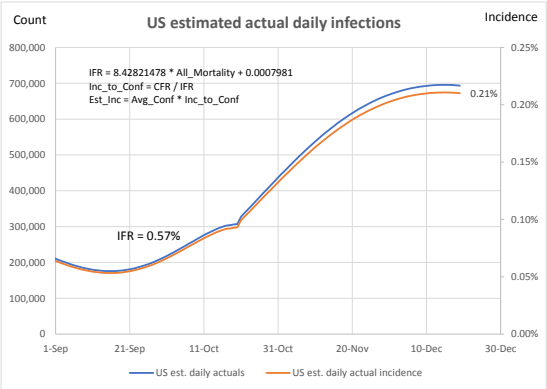






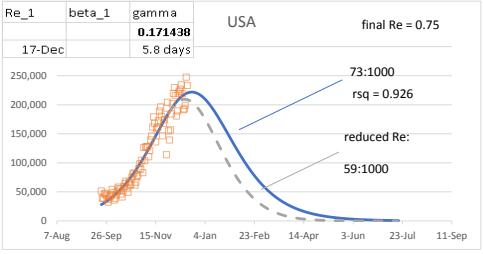




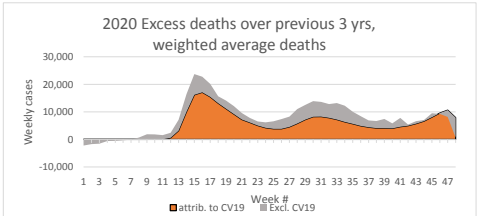


Demonstration of SIR model where R_e is linearly reduced to 0.75 at the end of the sequence:

Re_1	beta_1	gamma
		0.171438
17-Dec		5.8 days



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%).



<u>False Positives Demonstration</u>

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 14 = 2.940%

	Positive	Negative	
test pos	2.911%	0.971%	3.88%
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%	75.0%
FALSE +	0.971%/3.88%	25.0%
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 48 weeks

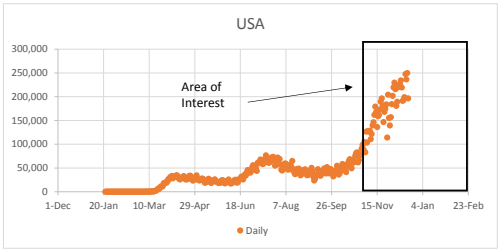
	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	855:100,000	855:100,000	-
2020	978:100,000	890:100,000	-
Diff.	123:100,000	35:100,000	88:100,000
Diff.	+14.4%	+4.1%	+10.3%

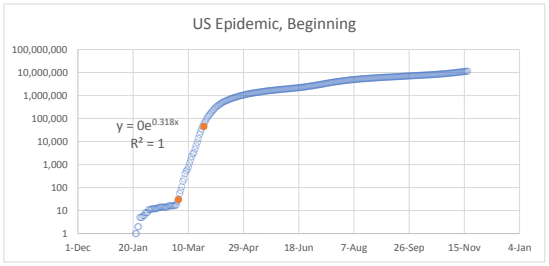
3 yr average weighted

859:100,000

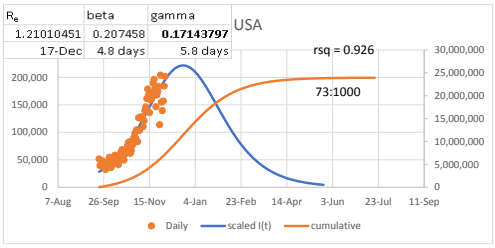
29% of All-Cause excess deaths are non-CV19

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





R_e	beta	gamma
1.21010451	0.207458	**0.17143797**
17-Dec	4.8 days	5.8 days



R_e	beta	gamma
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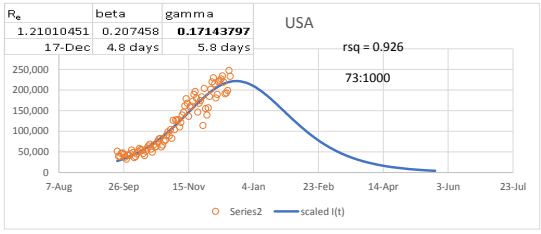
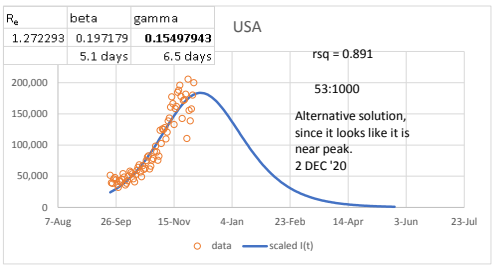
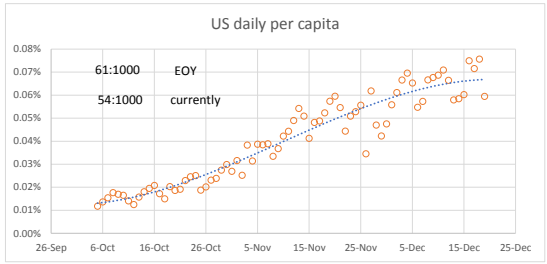
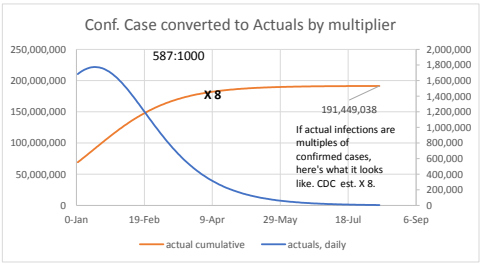


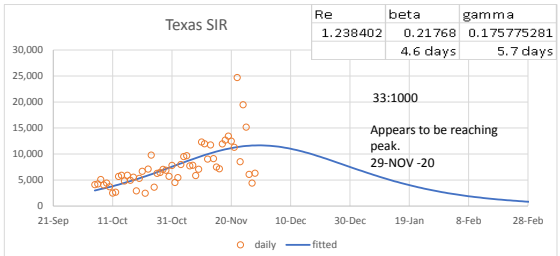
R_e	beta	gamma
1.272293	0.197179	**0.15497943**
	5.1 days	6.5 days



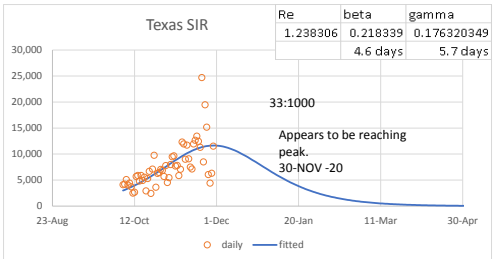




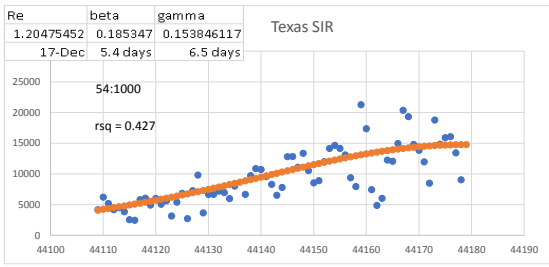
Re	beta	gamma
1.238402	0.21768	0.175775281
	4.6 days	5.7 days



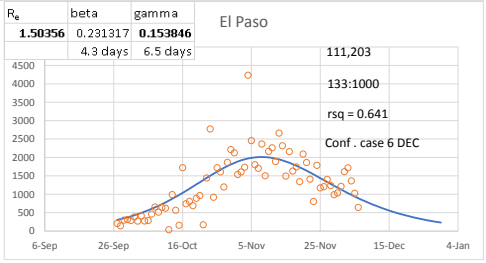
Re	beta	gamma
1.238306	0.218339	0.176320349
	4.6 days	5.7 days



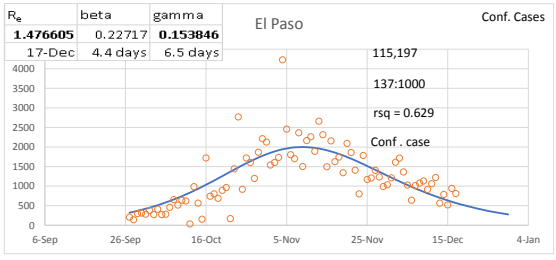
Re	beta	gamma
1.20475452	0.185347	0.153846117
17-Dec	5.4 days	6.5 days



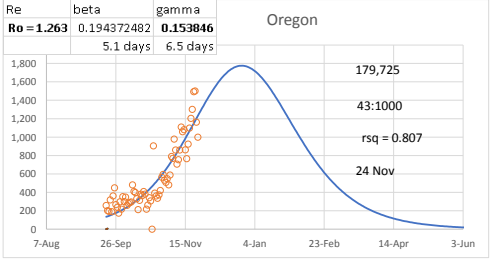
R_e	beta	gamma
1.50356	0.231317	**0.153846**
	4.3 days	6.5 days



R_e	beta	gamma
1.476605	0.22717	**0.153846**
17-Dec	4.4 days	6.5 days



Re	beta	gamma
Ro = 1.263	0.194372482	**0.153846**
	5.1 days	6.5 days



Re	beta	gamma
Ro = 1.243	0.302701012	**0.243576**
12/17/2020	3.3 days	4.1 days