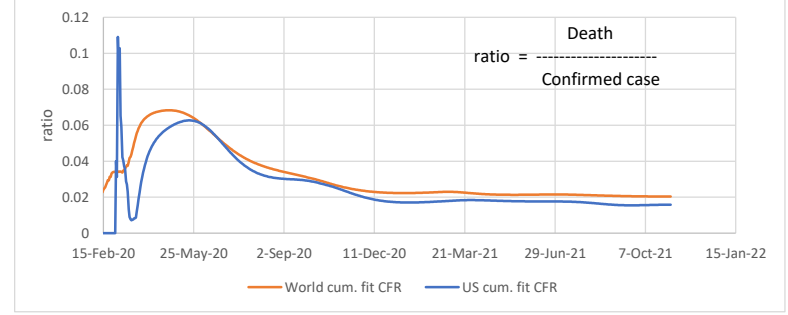
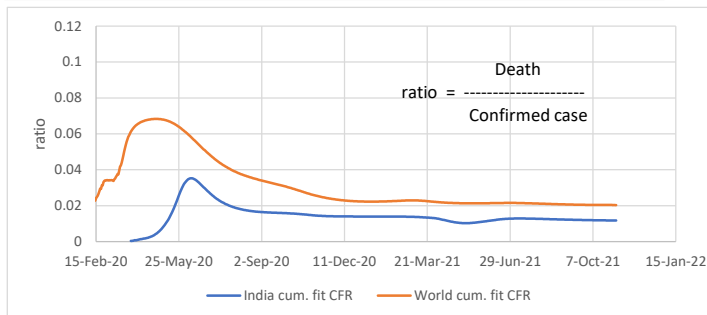
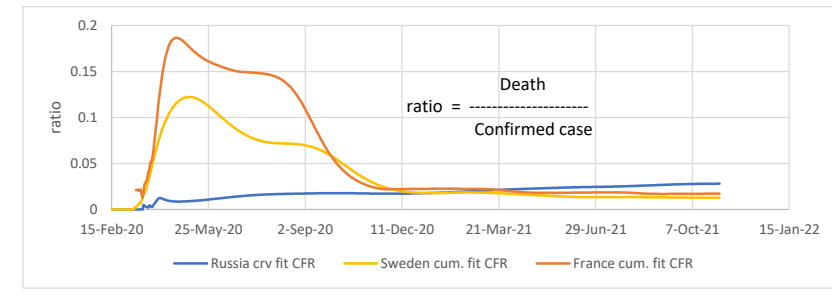
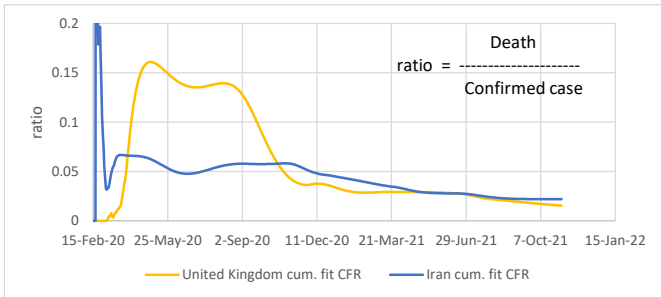
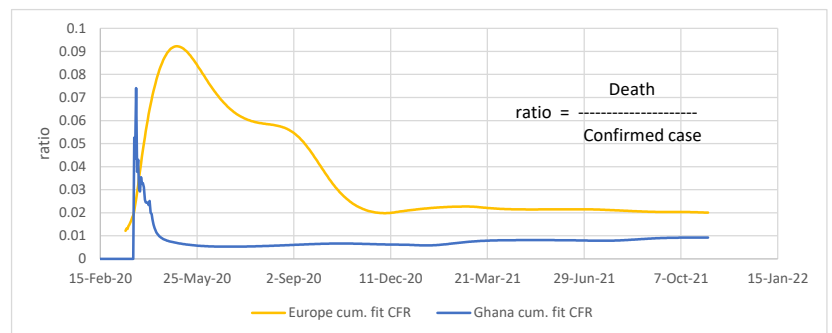
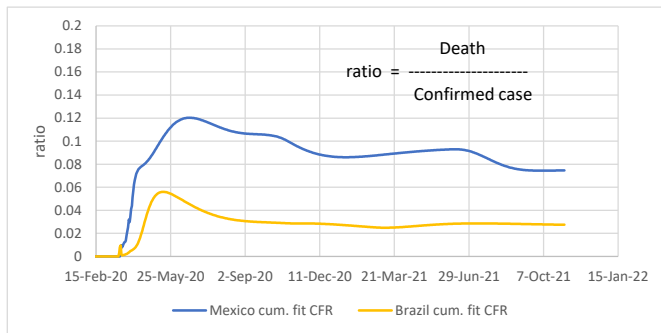
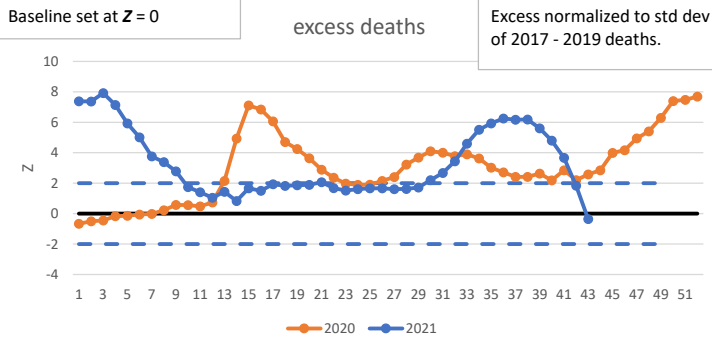


Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

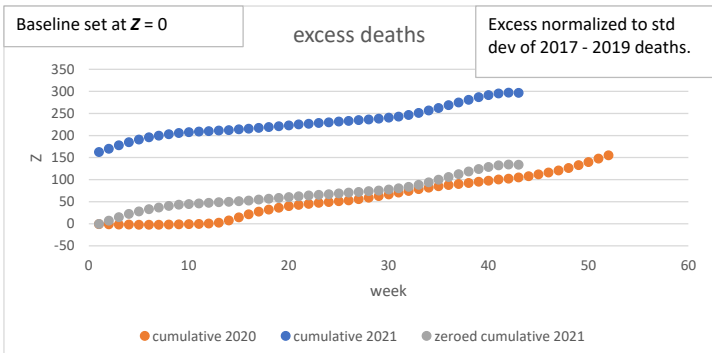


Excess deaths as a Z score:



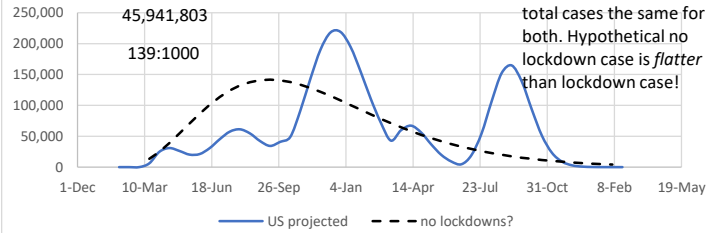
Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.

Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely



Confirmed Cases

US projected

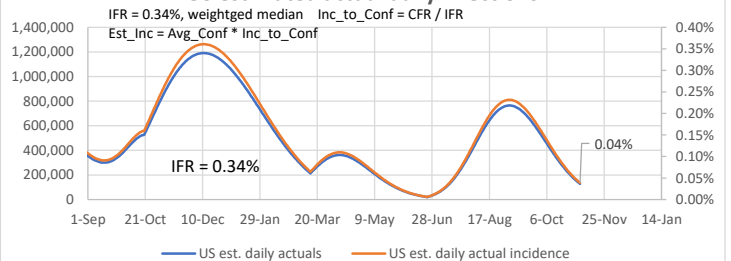


Same area under both curves; in other words, total cases the same for both. Hypothetical no lockdown case is flatter than lockdown case!

Count

US estimated actual daily infections

Incidence



False Positives Demonstration

Use 0.04% as estimated daily incidence

Prevalence estimated as avg. infected period of 2 weeks X incidence

95% accuracy of test

	Positive	Negative	
test pos	1.463%	4.923%	6.39%
test neg	0.077%	93.537%	93.61%
	1.540%	98.460%	100.00%

False pos. is more than half of total positives.

TRUE +	1.463%/6.39%	22.9%
FALSE +	4.923%/6.39%	77.1%
Total		100.00%

0.04% X 14 = 0.560%

Sensitivity

Probability of detection

where condition exists

True + / (True + & False -)

95%

Specificity

Probability of not detecting where

condition doesn't exist

True - / (True - & False +)

95%

Example only; sensitivity and specificity not necessarily equal.

USA Excess Deaths, 2020 (from CDC data):

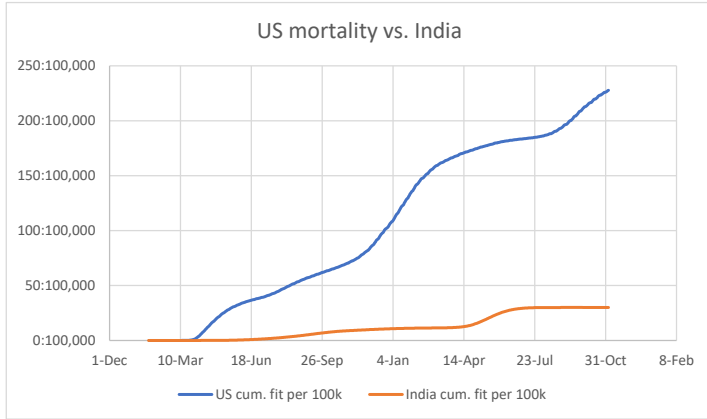
Annualized on 52 weeks			
	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	859:100,000	859:100,000	-
2020	1016:100,000	905:100,000	-
Diff.	157:100,000	46:100,000	111:100,000

3 yr average	859:100,000
29% of All-Cause excess deaths are non-CV19	
https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkxf-xrst/data	

USA Excess Deaths to date (2021, from CDC data):

43 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	708:100,000	708:100,000	-
2021	850:100,000	731:100,000	-
Diff.	142:100,000	24:100,000	118:100,000

3 yr average	859:100,000
17% of All-Cause excess deaths are non-CV19	
https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkxf-xrst/data	

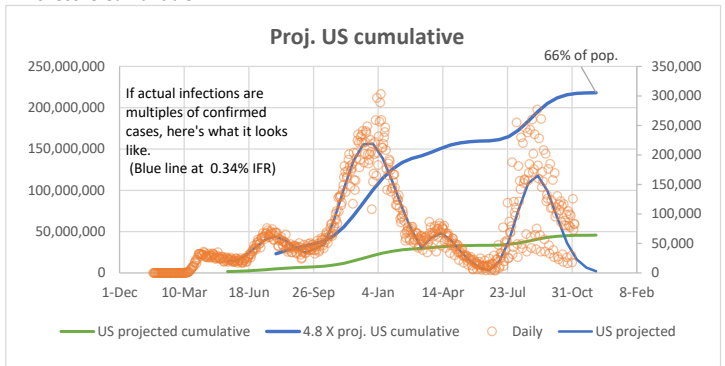
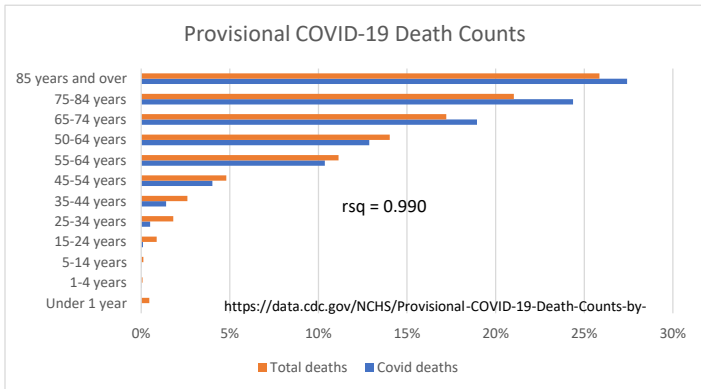


$$K = 0.318 \quad R_o : \quad R :$$

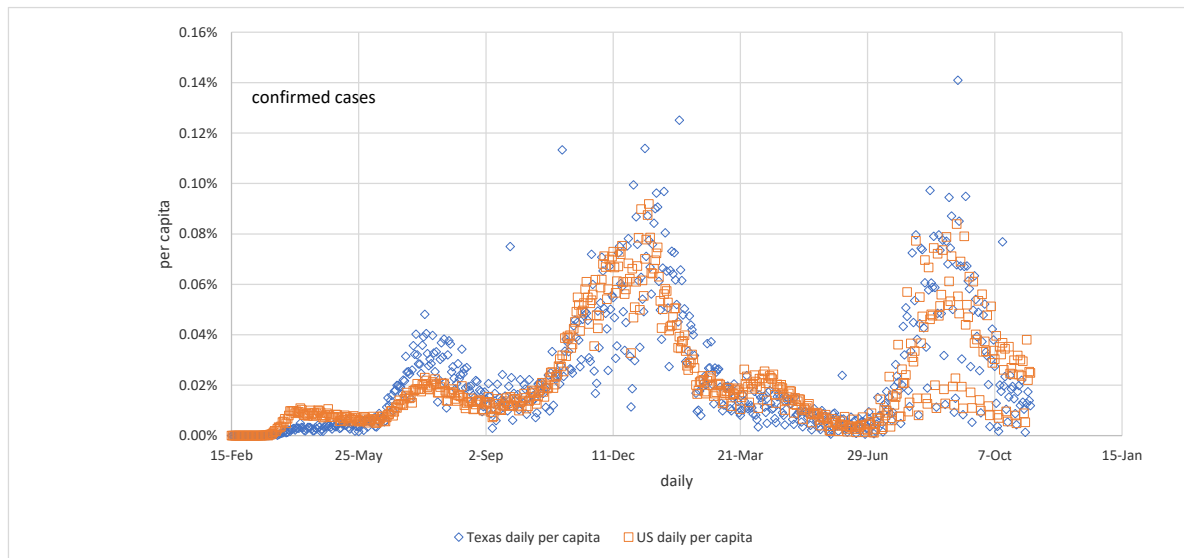
$$\text{gamma} = 0.171 \quad R_o = \exp(K/\text{gamma}) = 6.42 \quad 84\% \quad \leq \text{Herd immunity}$$

$$\text{gamma} = 0.286 \quad R > 1 - 1/R_o = 3.04 \quad 67\%$$

R is recovered variable.



US vs. Texas





<https://data.cdc.gov/NCHS/Weekly-Counts-of-Deaths-by-State-and-Select-Causes/muzy-jte6/data>