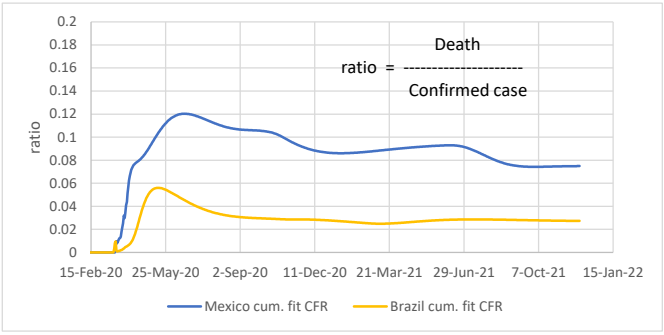
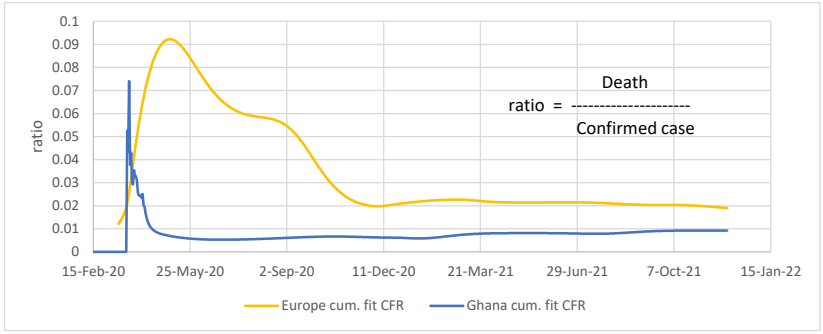
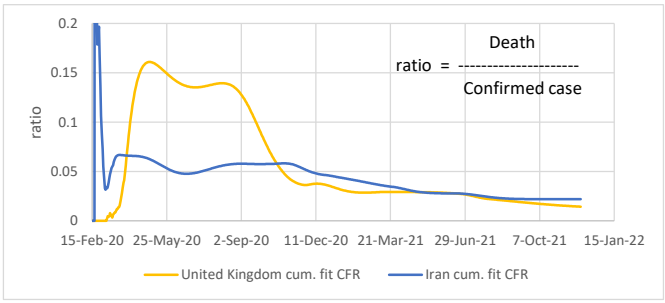
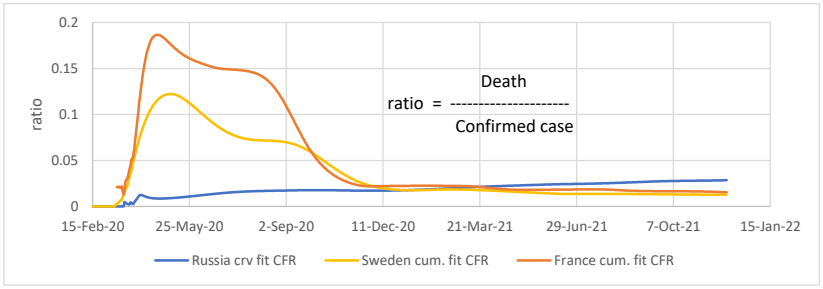
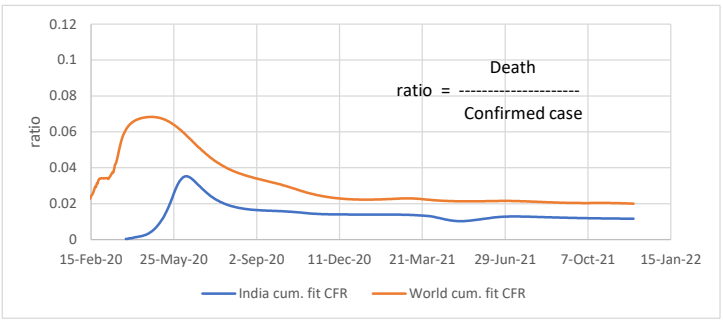
Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

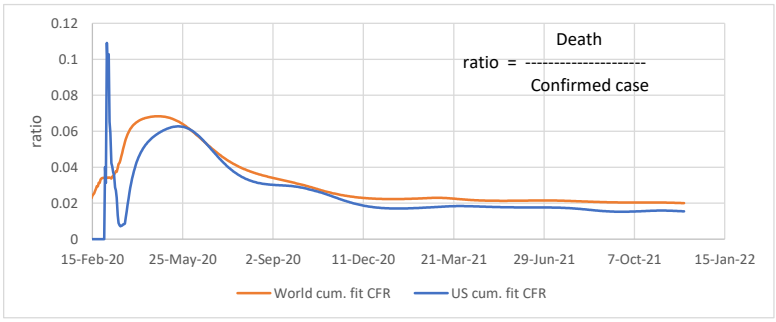




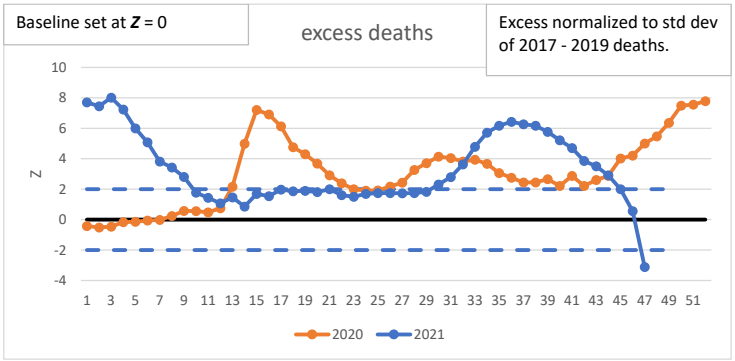


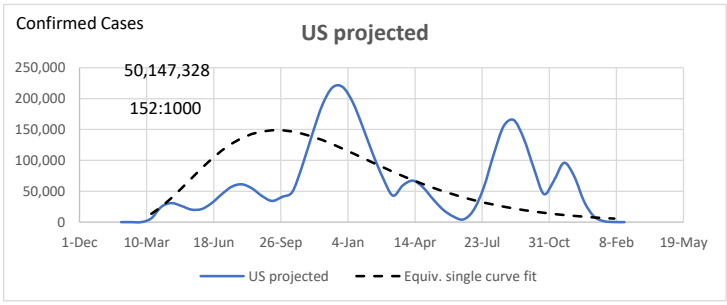






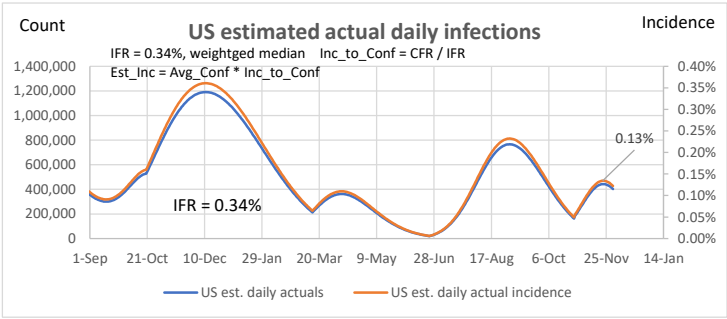
Excess deaths as a Z score:

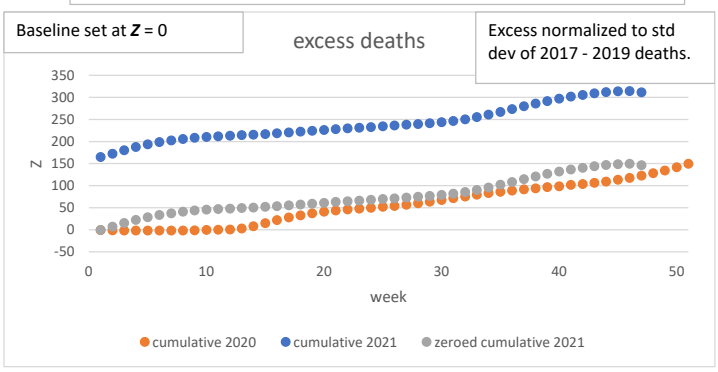




Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.

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





<u>False Positives Demonstration</u>

Use 0.15% as estimated daily incidence

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

0.15% X 14 = 2.100%

95% accuracy of test

	Positive	Negative	
test pos	1.995%	4.895%	6.89%
test neg	0.105%	93.005%	93.11%
	2.100%	97.900%	100.00%

False pos. is more than half of total positives.

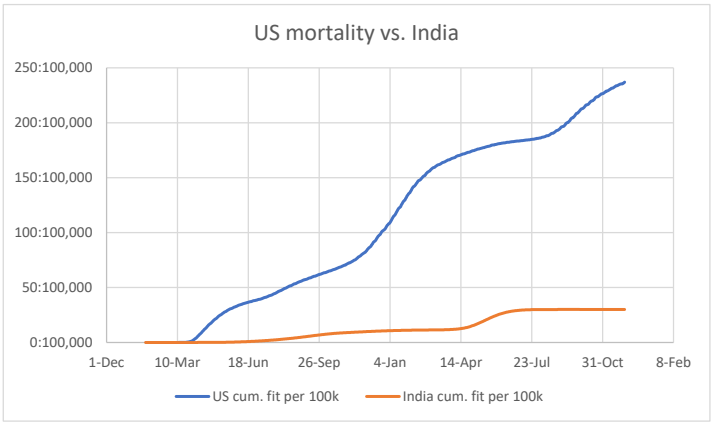
TRUE +	1.995%/6.89%	29.0%
FALSE +	4.895%/6.89%	71.0%
Total	----------	100.00%

<u>Sensitivity</u>
Probability of detection where condition exists
True + / (True + & False -)
95%

<u>Specificity</u>
Probability of not detecting where condition doesn't exist
True - / (True - & False +)
95%

https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data

Example only; sensitivity and specifity 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/xkkf-xrst/data

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

47 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	775:100,000	775:100,000	-
2021	927:100,000	800:100,000	-
Diff.	152:100,000	25:100,000	127:100,000

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/xkkf-xrst/data

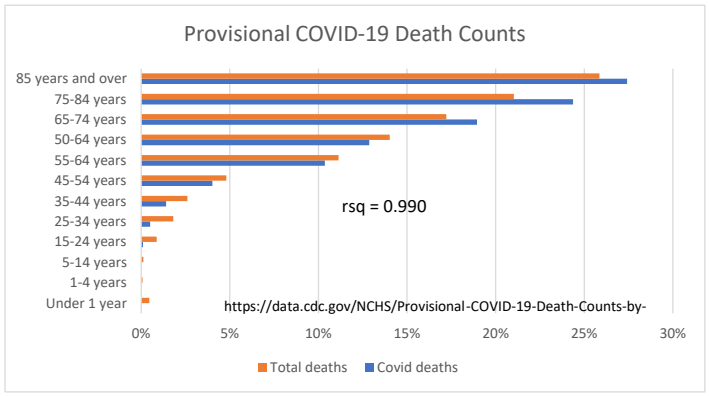
K = 0.318 R_o: R :

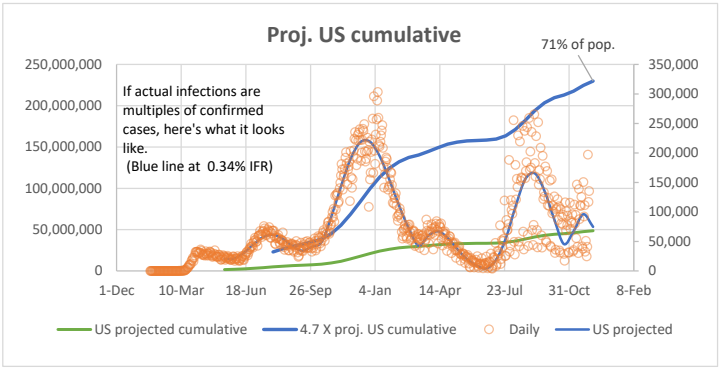
gamma = 0.171 R_o = exp(K /gamma) = 6.42 84%

gamma = 0.286 R > 1- 1/R_o = 3.04 67%

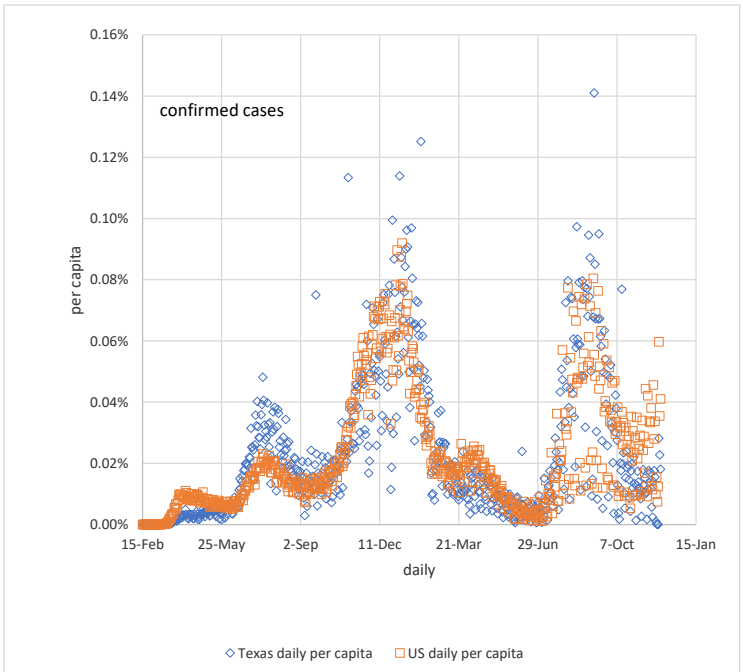
<=Herd immunity

R is *recovered* variable.

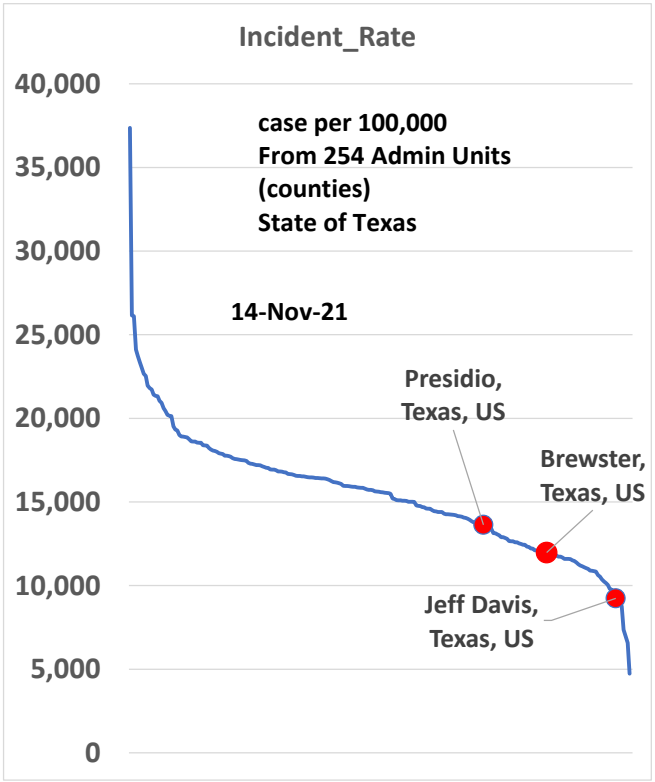


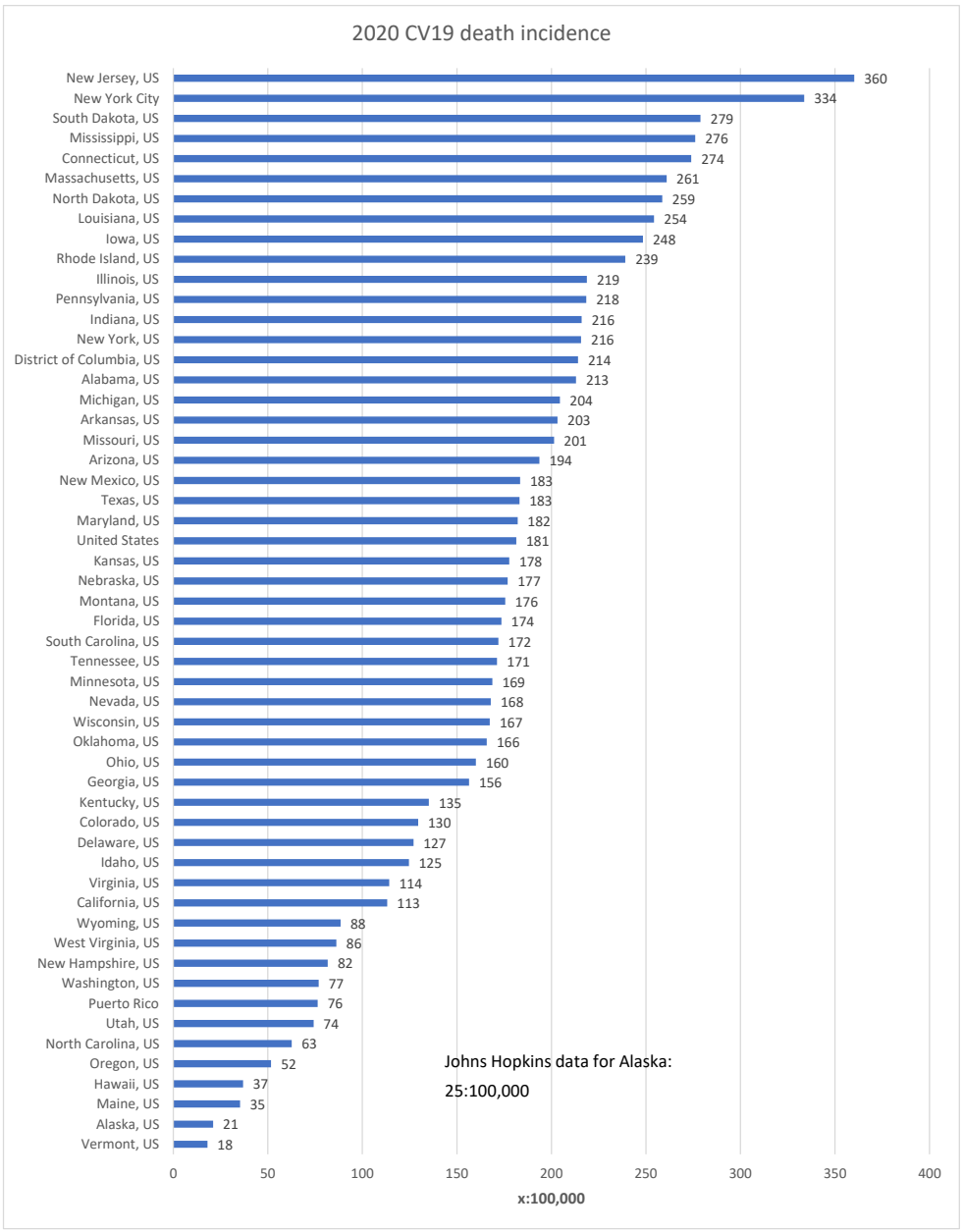


US vs. Texas



Tri-Counties in Texas:





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