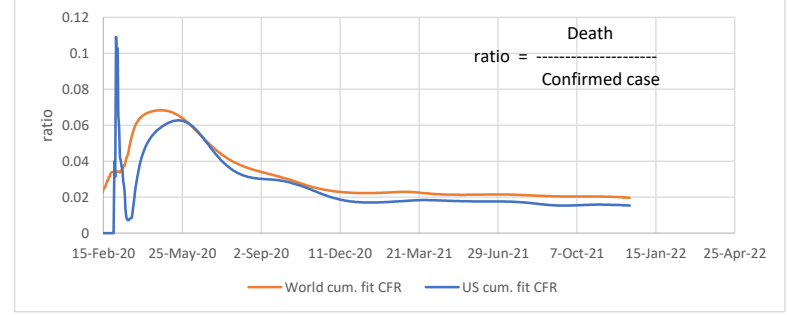
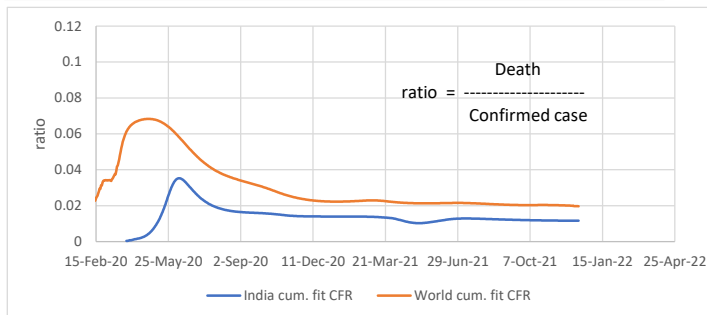
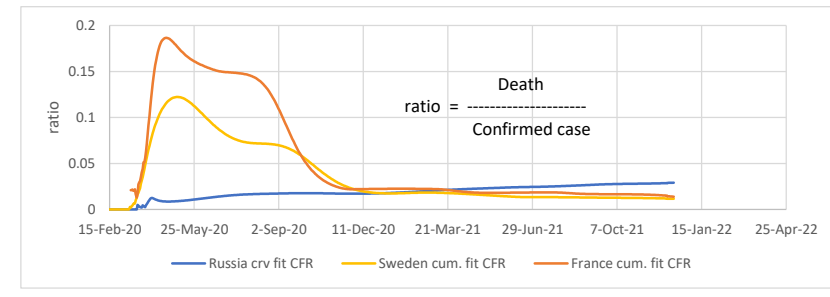
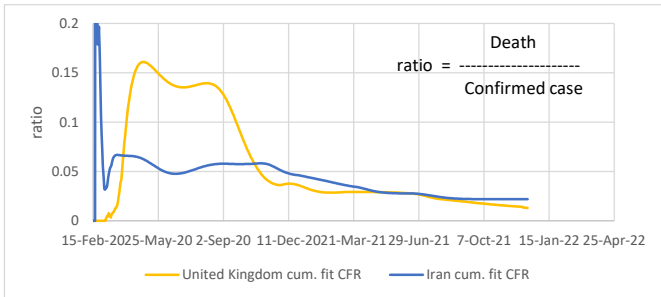
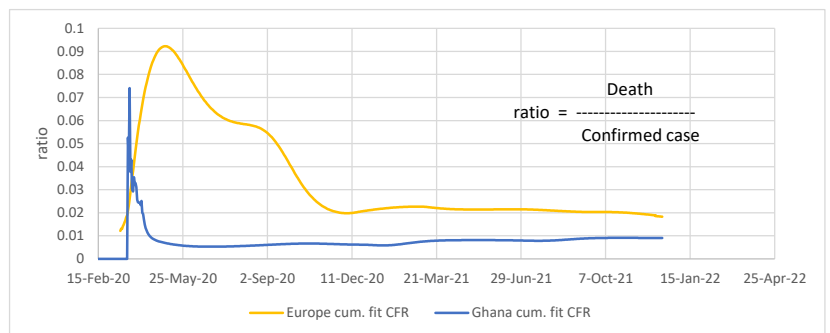
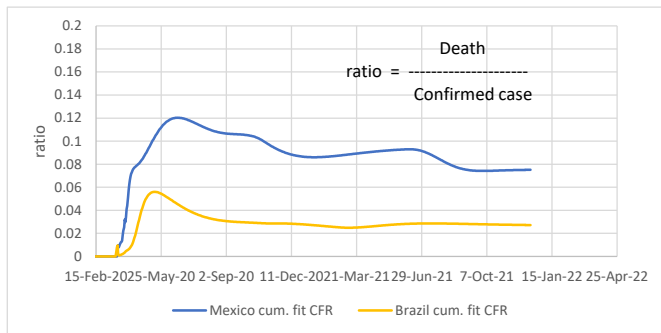
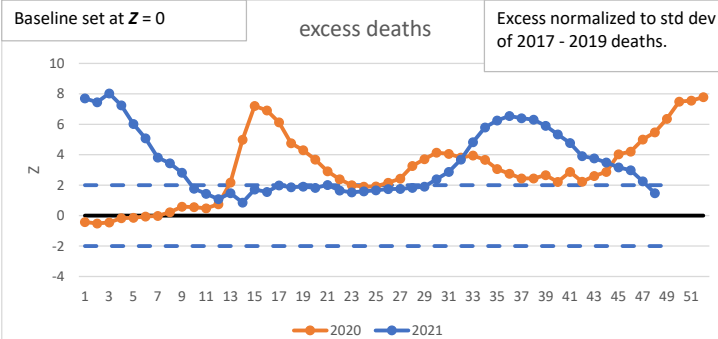


Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

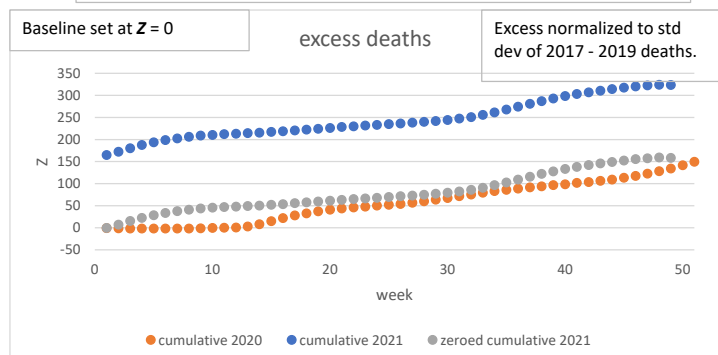


Excess deaths as a Z score:

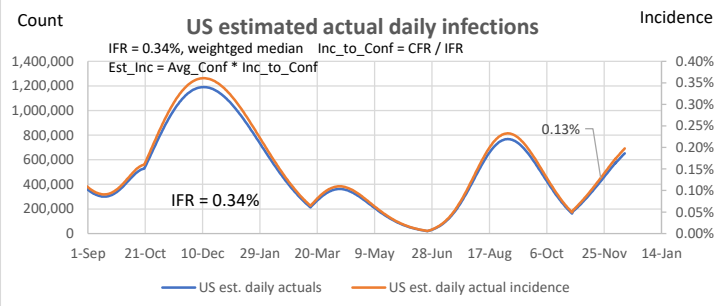
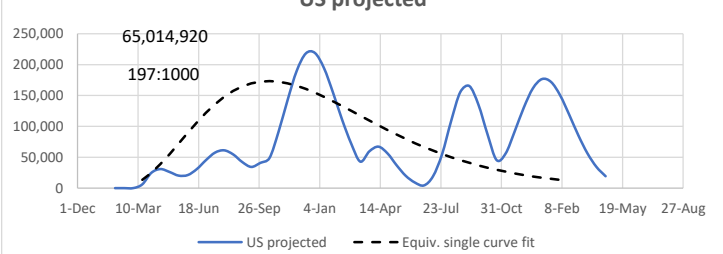


Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.

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



False Positives Demonstration

Use 0.15% as estimated daily incidence

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

		95% accuracy of test		0.15% X 14 = 2.100%	
		Positive	Negative		
test pos		1.995%	4.895%	6.89%	Sensitivity Probability of detection where condition exists True + / (True + & False -) 95%
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%	Specificity Probability of not detecting where condition doesn't exist True - / (True - & False +) 95%
		FALSE +	4.895%/6.89%	71.0%	
		Total		100.00%	

Example only; sensitivity and specificity not necessarily equal.

USA Excess Deaths, 2020 (from CDC data):

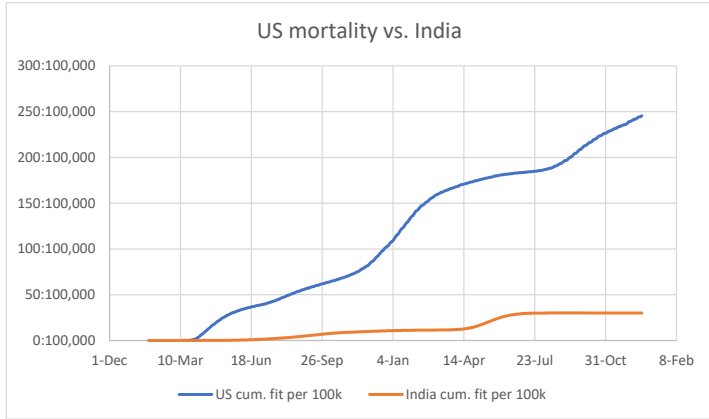
Annualized on 52 weeks			
	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	859:100,000	859:100,000	-
2020	1016:100,000	905:100,000	-
Diff.	157:100,000	46:100,000	111:100,000

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):

49 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	808:100,000	808:100,000	-
2021	973:100,000	841:100,000	-
Diff.	164:100,000	32:100,000	132:100,000

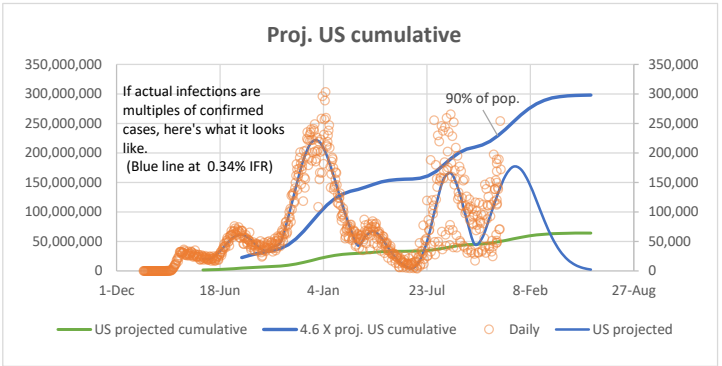
3 yr average	859:100,000
20% of All-Cause excess deaths are non-CV19	
https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkxf-xrst/data	



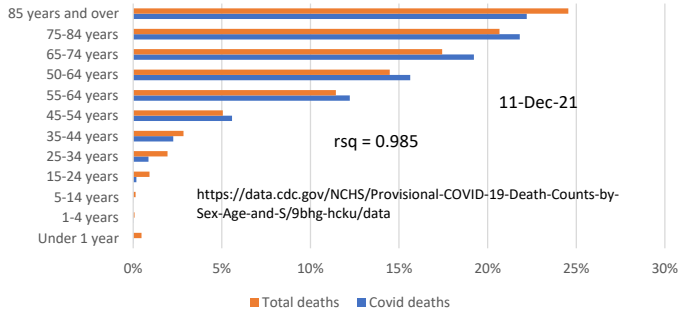
$$K = 0.318 \quad R_o = \exp(K/\gamma) = 6.42 \quad R = 84\% \quad \leq \text{Herd immunity}$$

$$\gamma = 0.171 \quad R > 1 - 1/R_o = 3.04 \quad 67\%$$

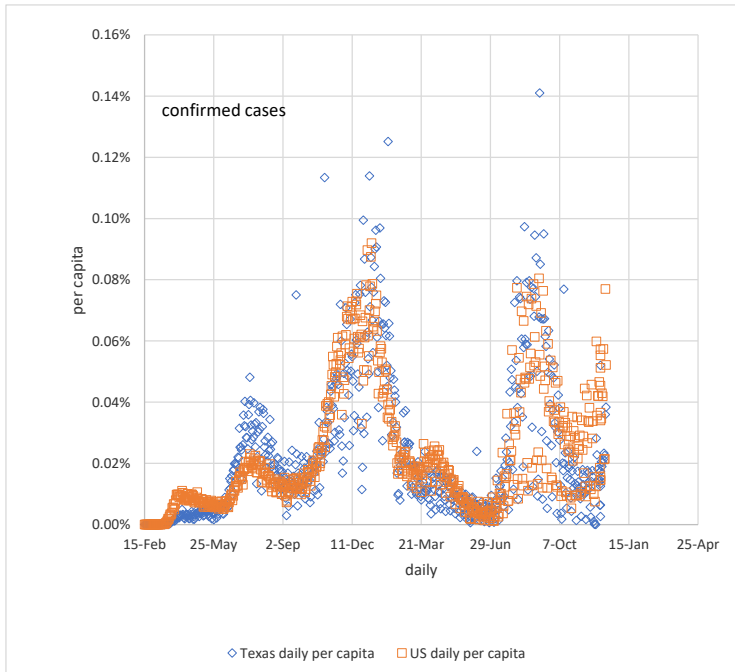
R is recovered variable.



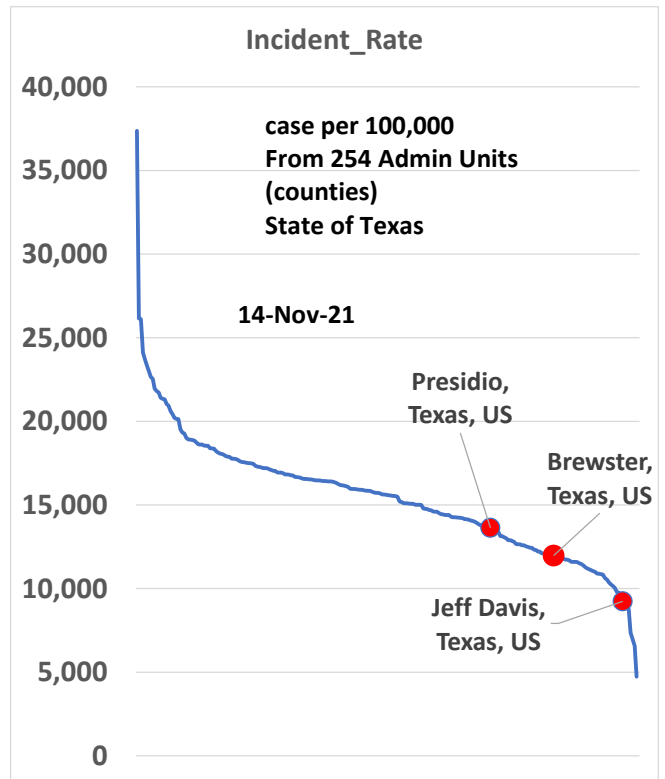
Provisional COVID-19 Death Counts



US vs. Texas



Tri-Counties in Texas:





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