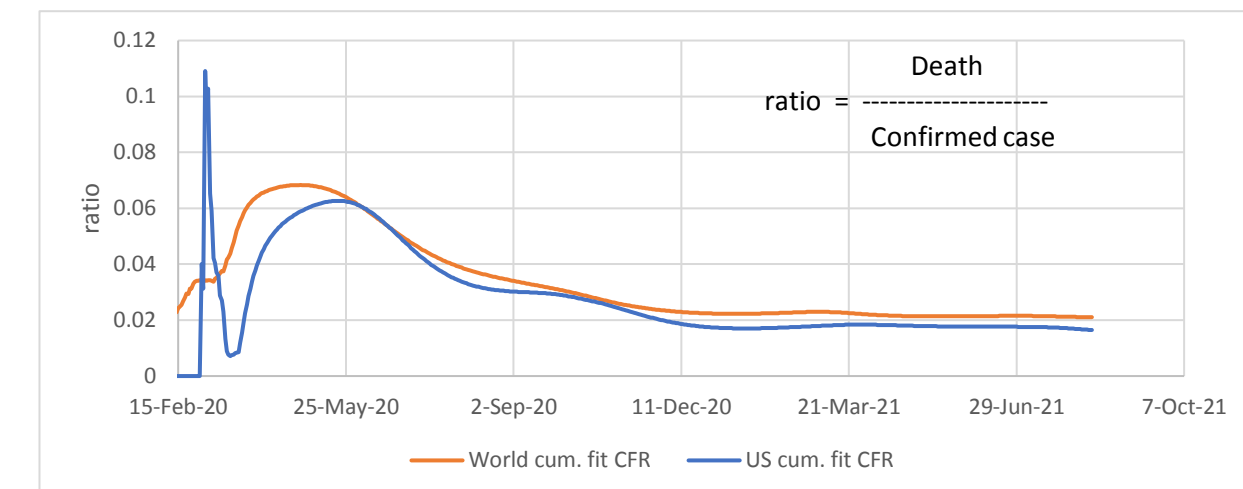
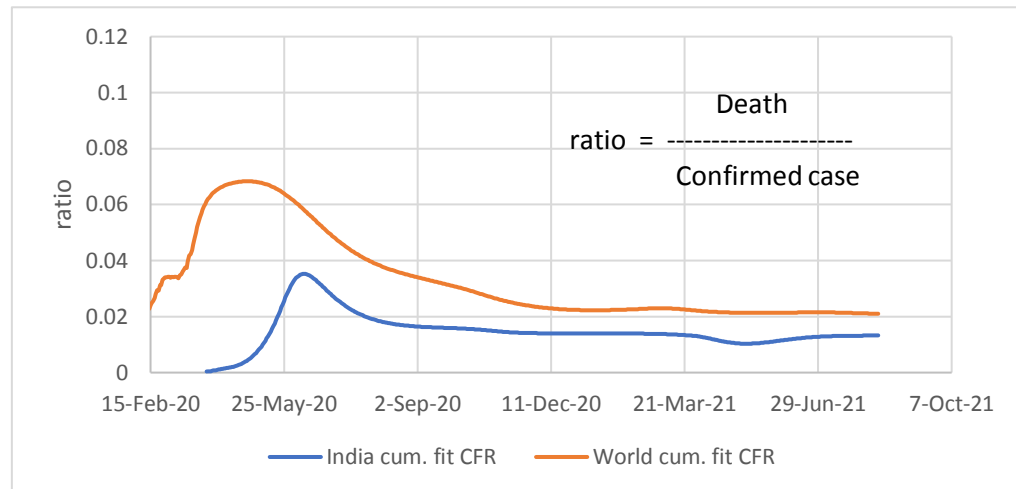
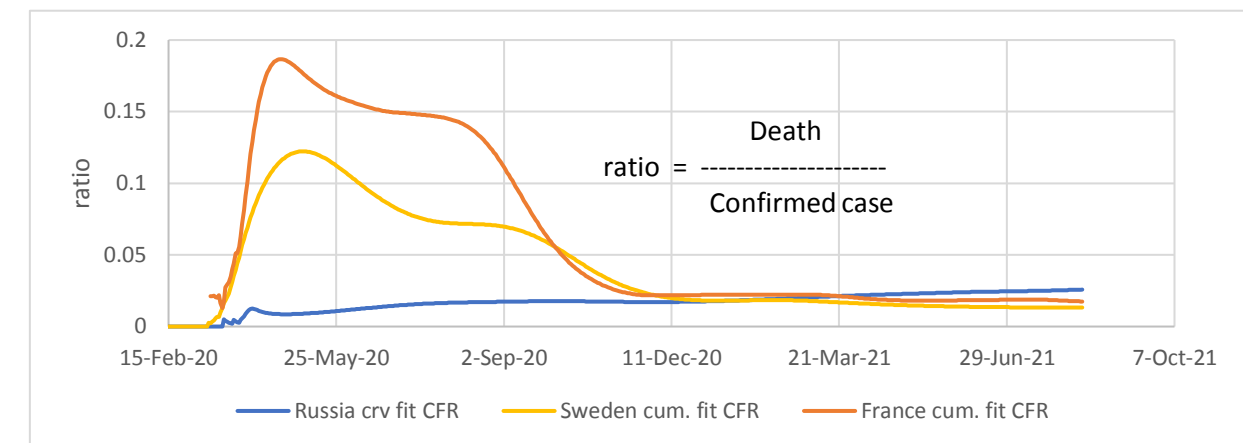
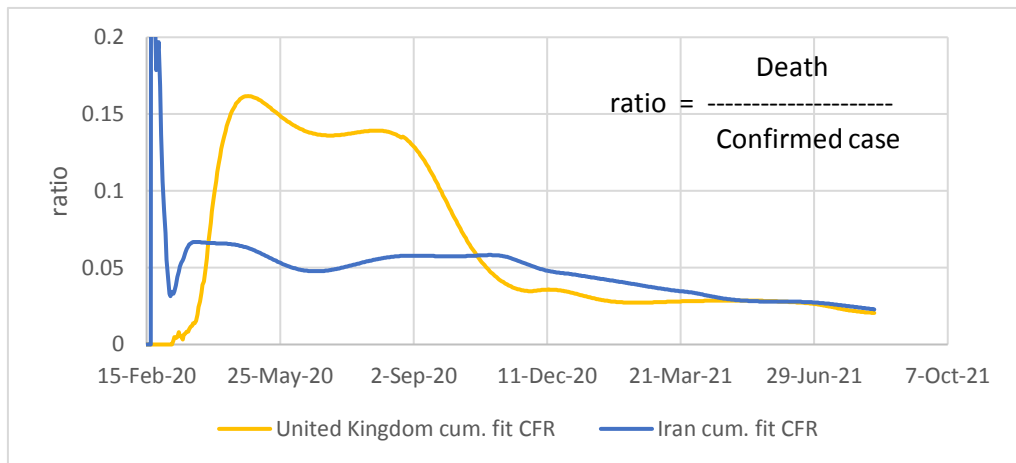
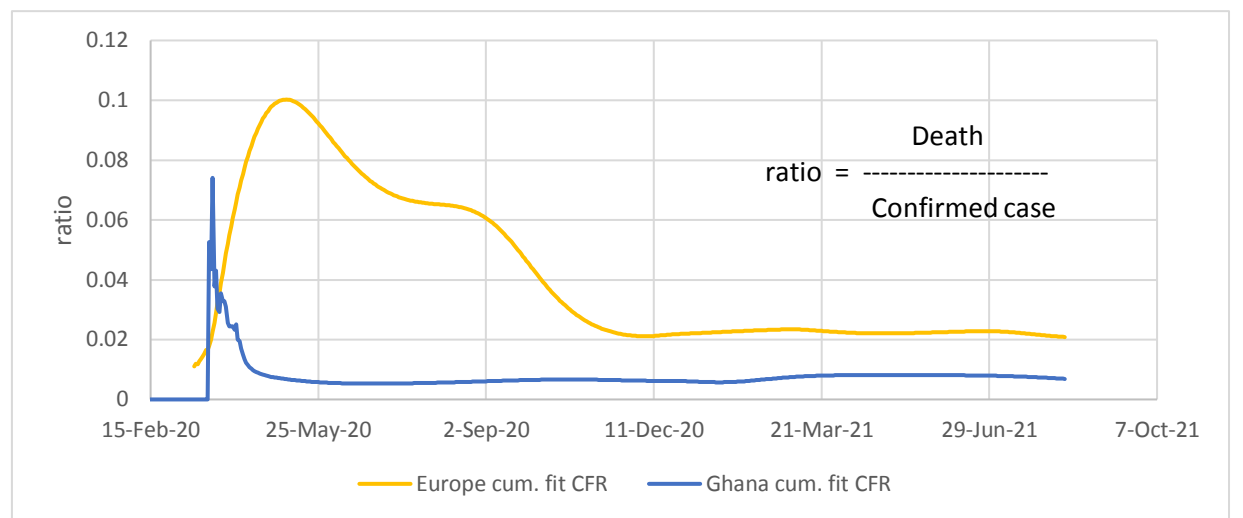
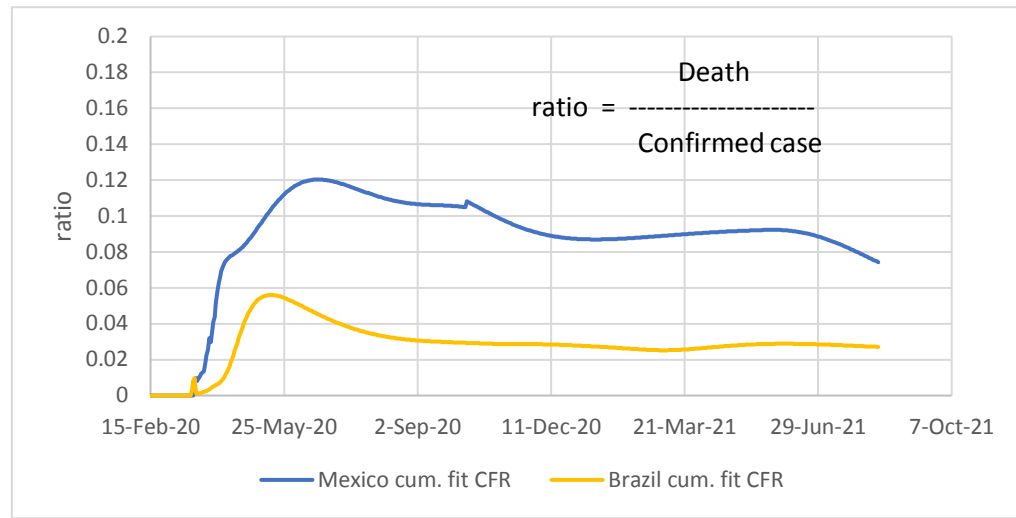
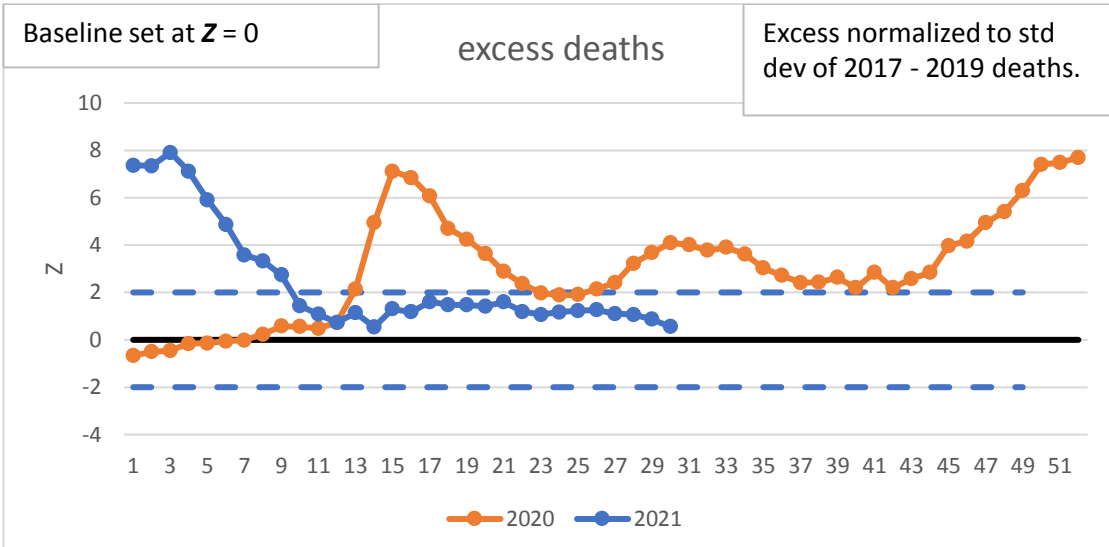


## Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

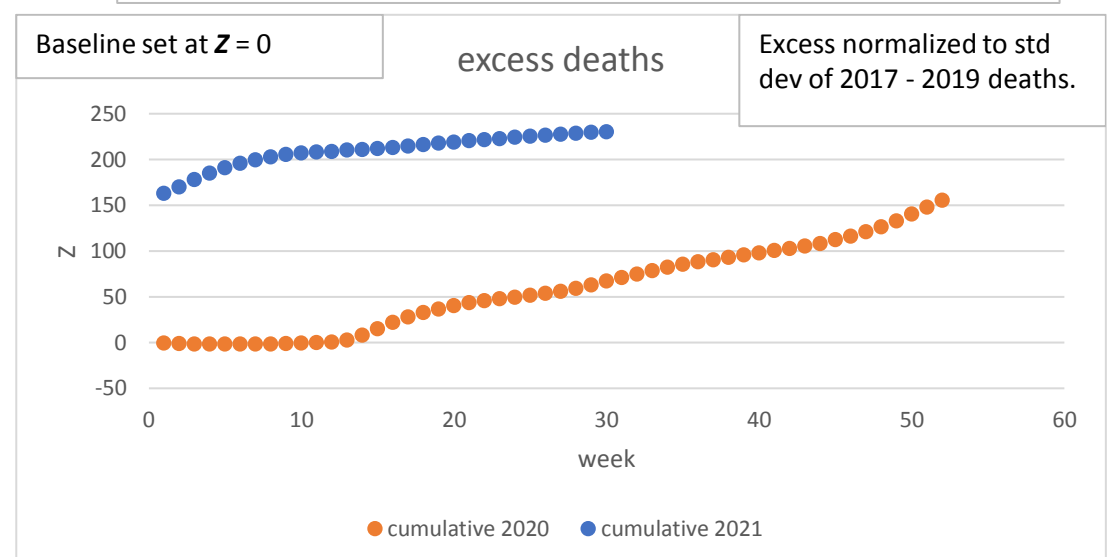


### Excess deaths as a Z score:

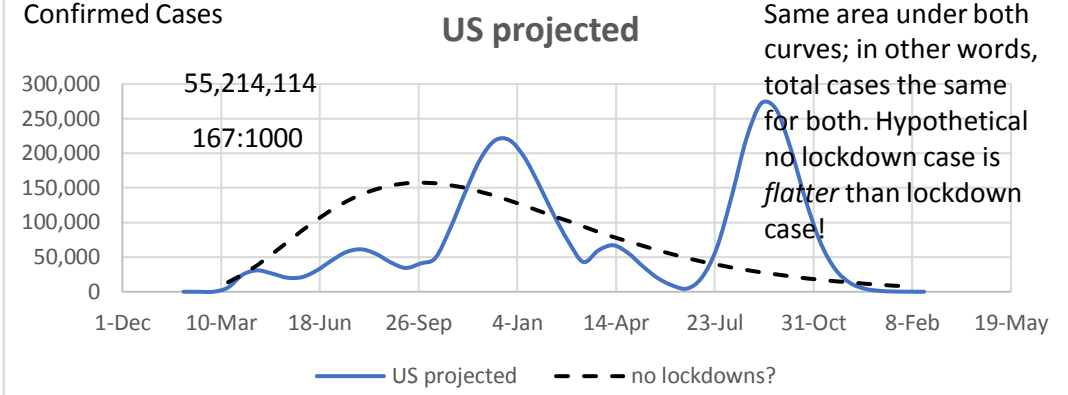


Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.

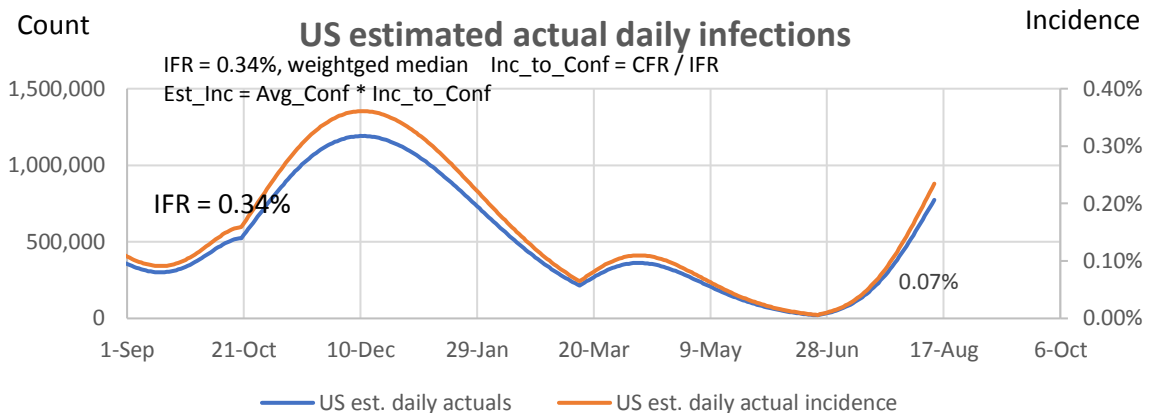
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely



### Confirmed Cases



### Count



### False Positives Demonstration

Use 0.07% as estimated daily incidence

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

99% accuracy of test

$0.07\% \times 14 = 0.980\%$

	Positive	Negative	
test pos	0.970%	0.990%	1.96%
test neg	0.010%	98.030%	98.04%
	0.980%	99.020%	100.00%

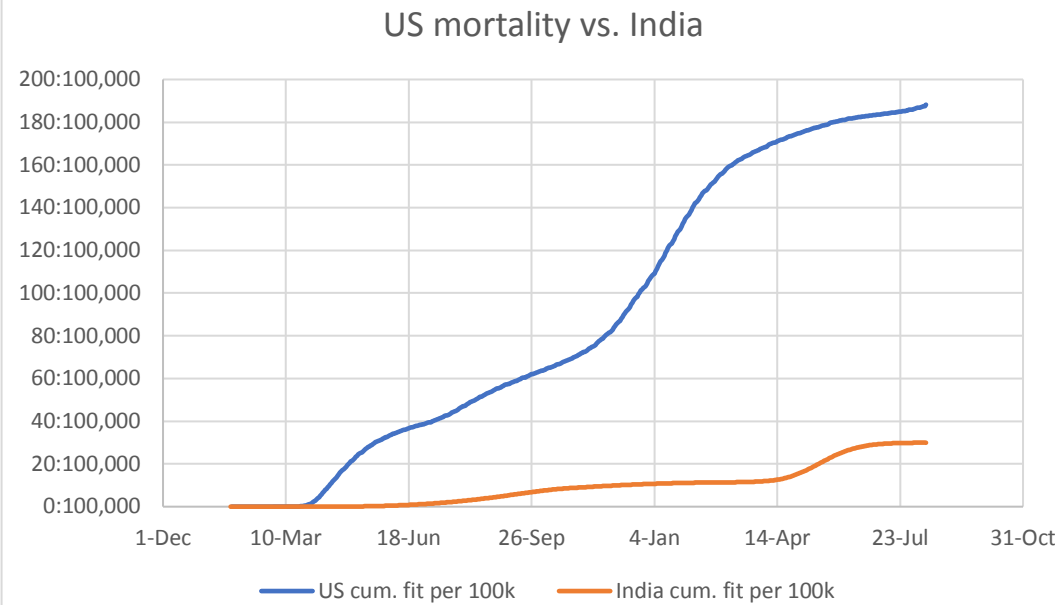
False pos. is more than half of total positives.

TRUE + 0.97%/1.96% 49.5%

FALSE + 0.99%/1.96% 50.5%

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, 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 (from CDC data):

31 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	505:100,000	505:100,000	-
2021	578:100,000	518:100,000	-
Diff.	73:100,000	13:100,000	60:100,000

3 yr average
859:100,000

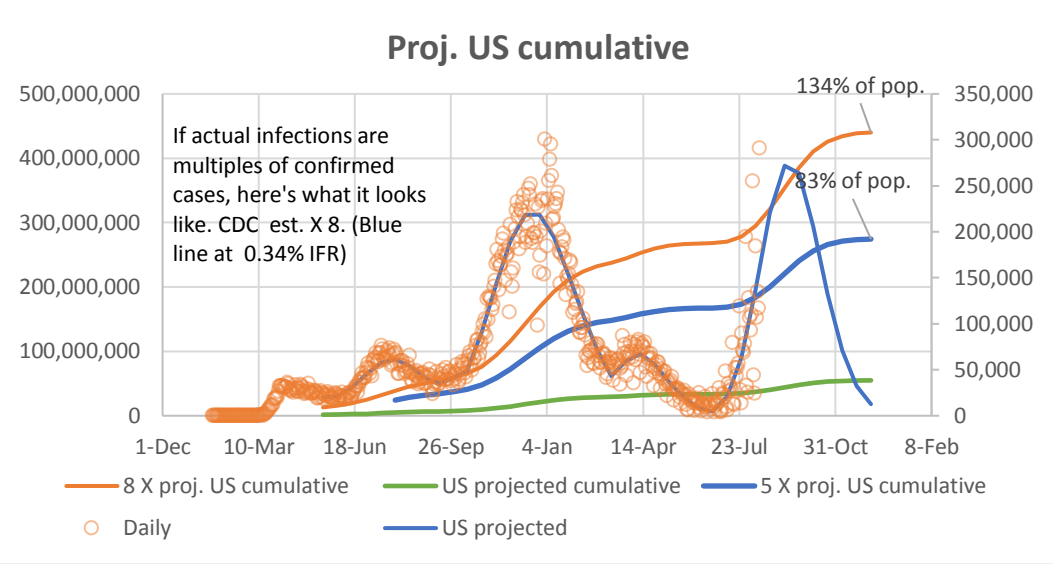
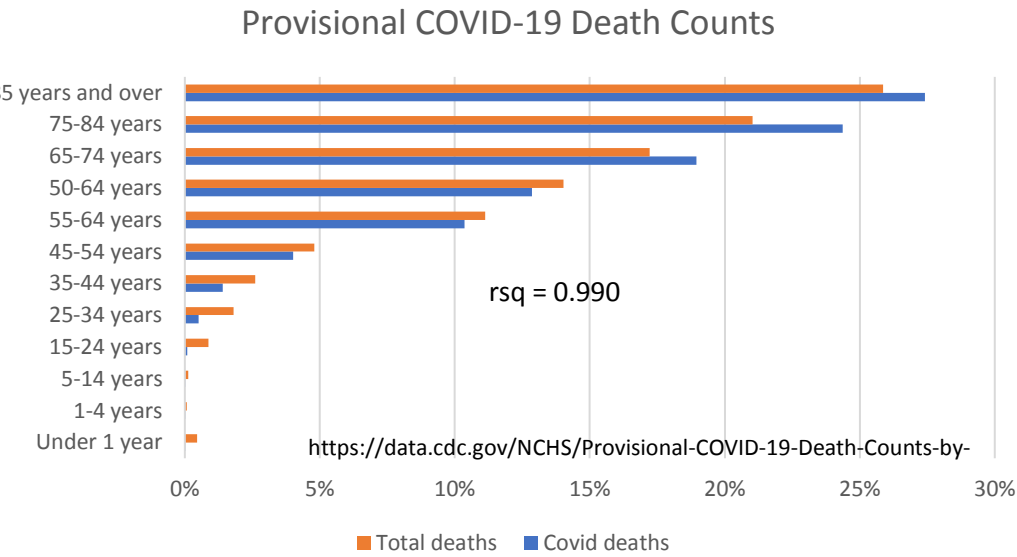
17% of All-Cause excess deaths are non-CV19

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

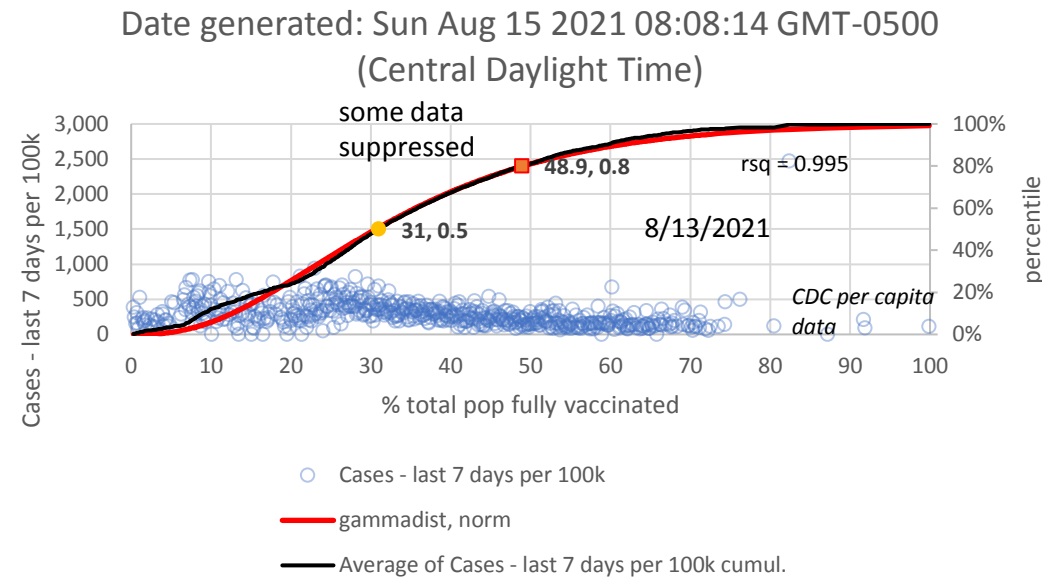
$K = 0.318$   $R_o :$   $R :$

$\gamma = 0.171$   $R_o = \exp(K/\gamma) = 6.42$  84%  
 $\gamma = 0.286$   $R > 1 - 1/R_o = 3.04$  67%  $\leq$  Herd immunity

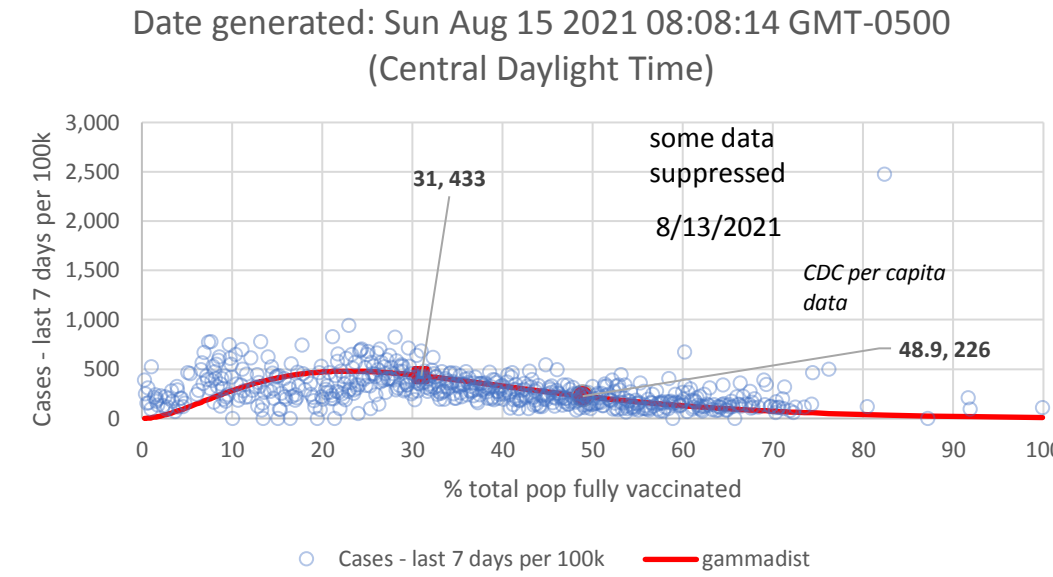
$R$  is recovered variable.



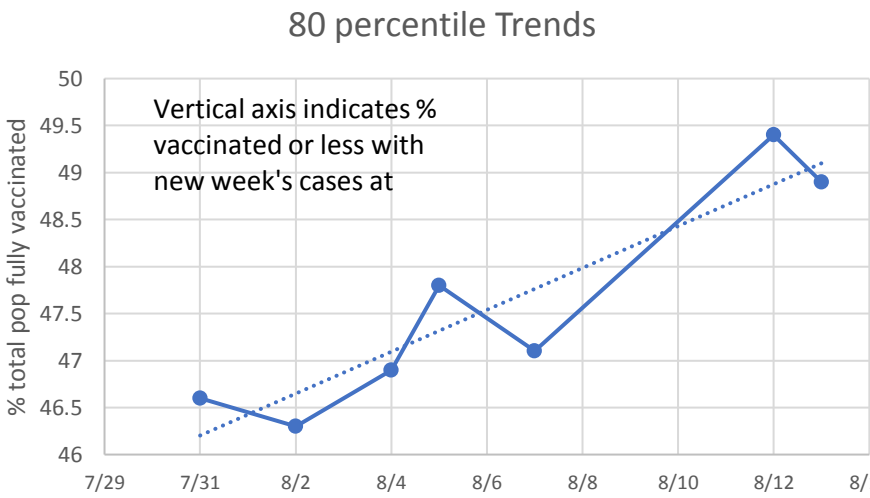
CDC data on week indicated new cases by % fully vaccinated.



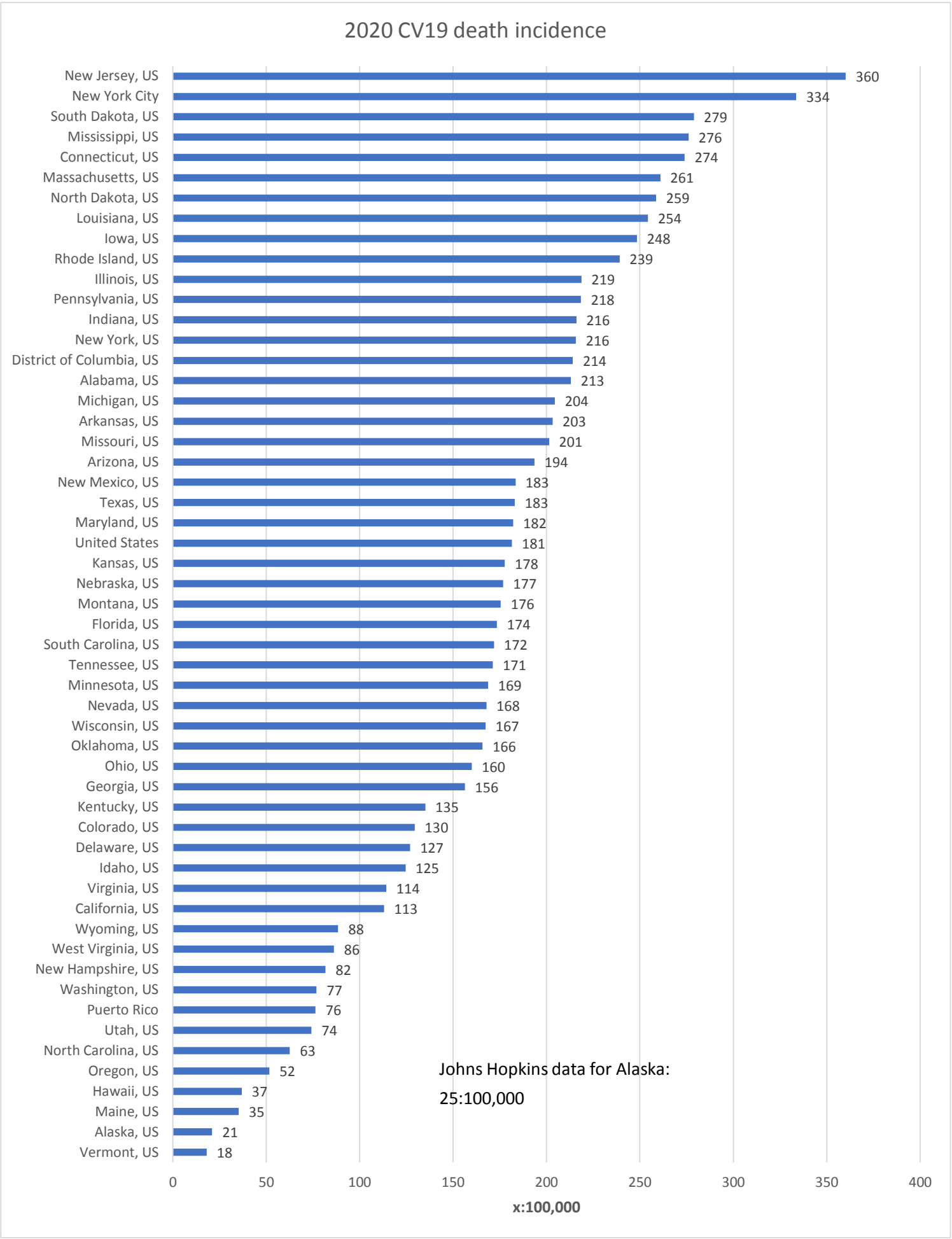
Estimates of Cases per 100k



reporting jurisdictions is not a uniform distribution; some data suppressed, for example Texas



<https://covid.cdc.gov/covid-data-tracker/#vaccination-case-rate>



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