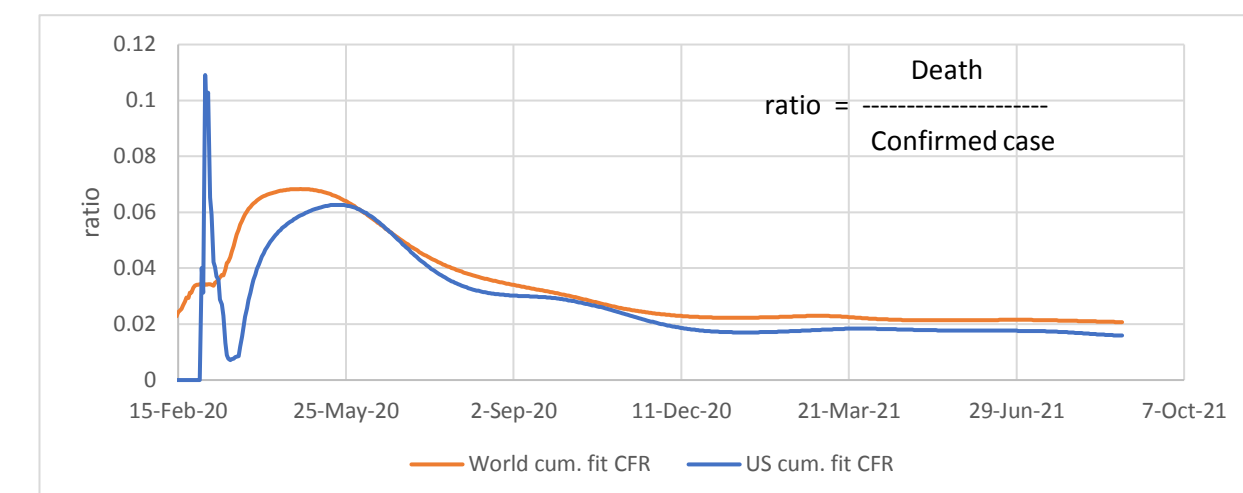
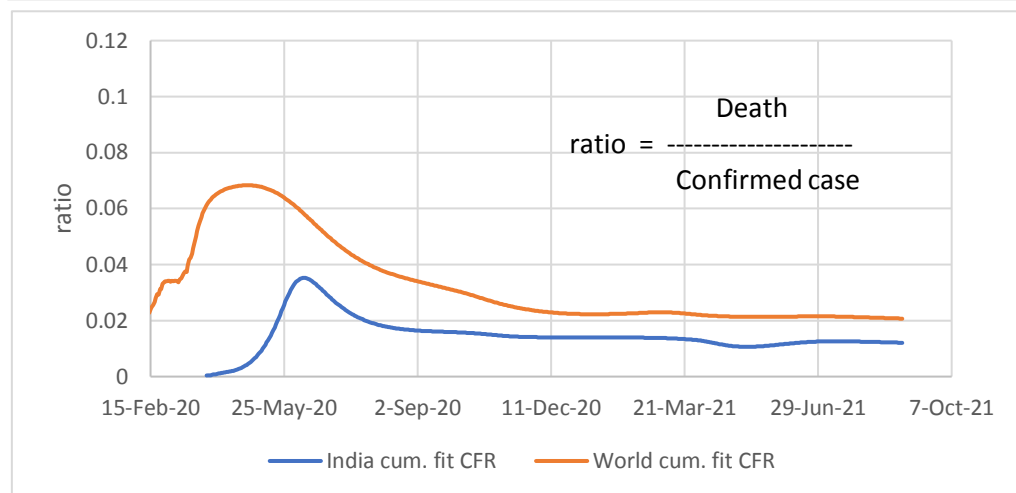
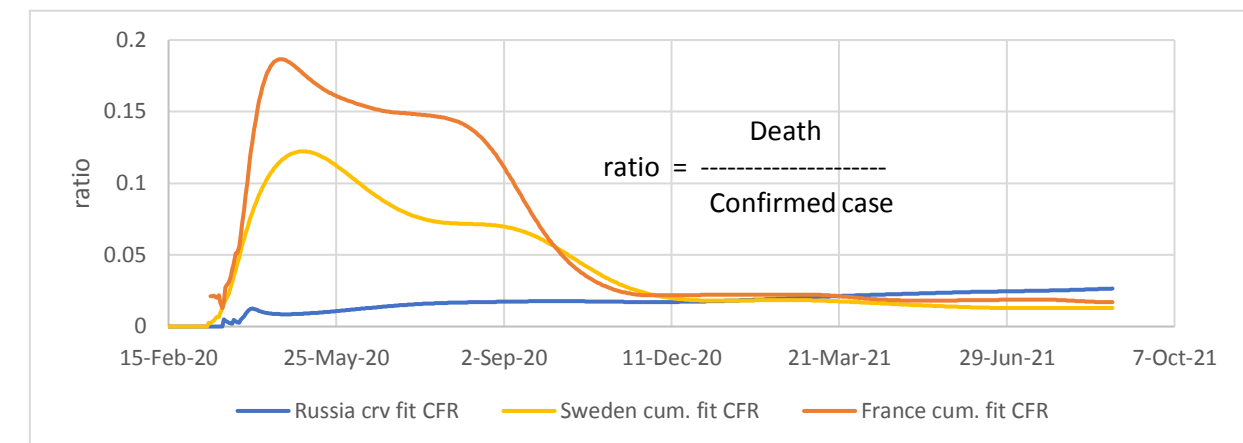
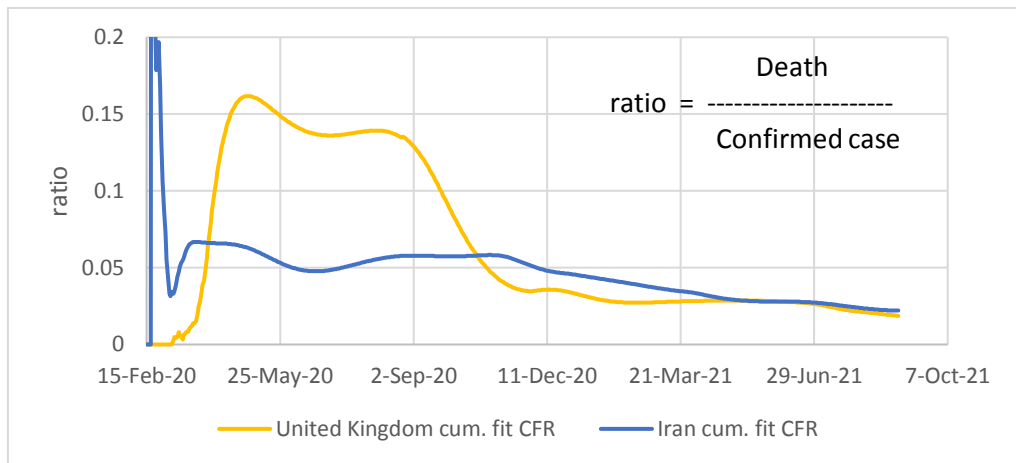
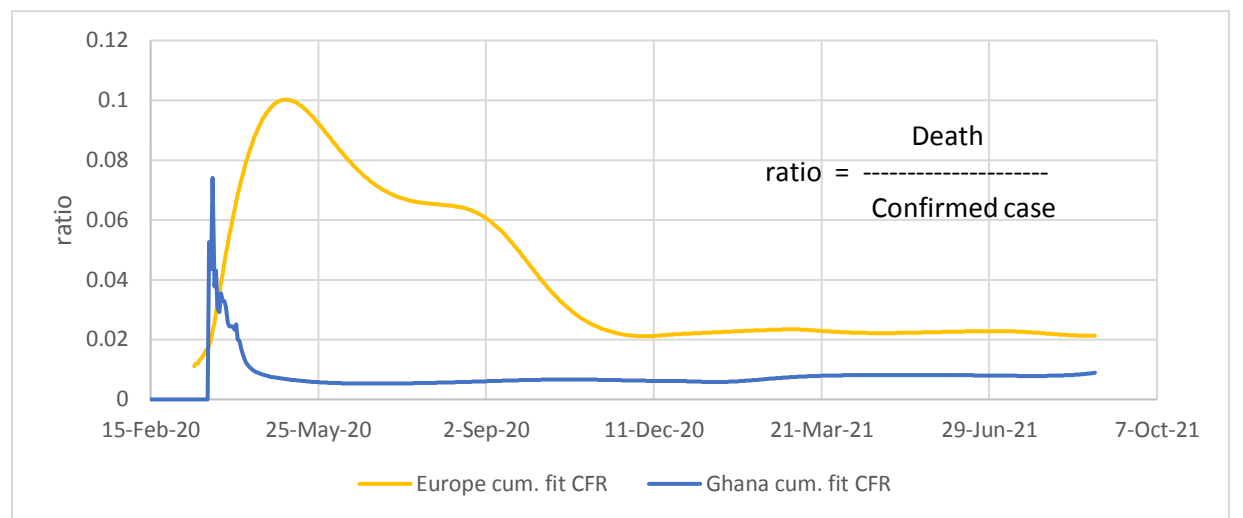
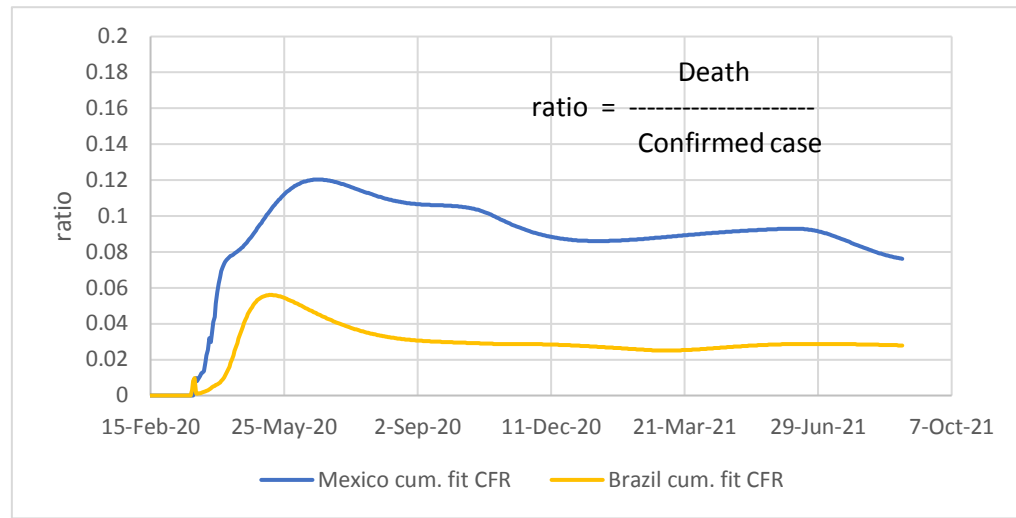
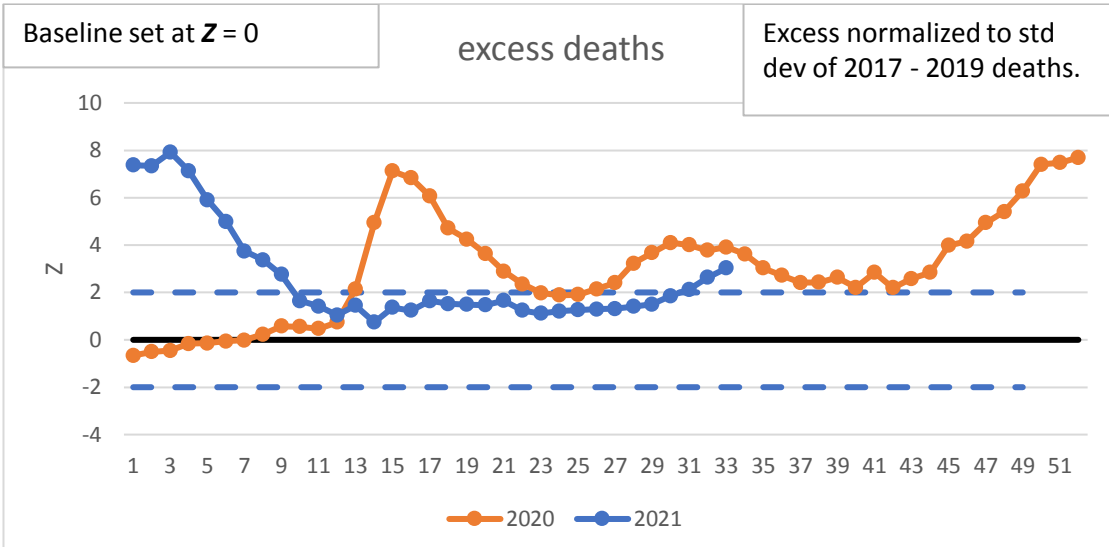


## Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

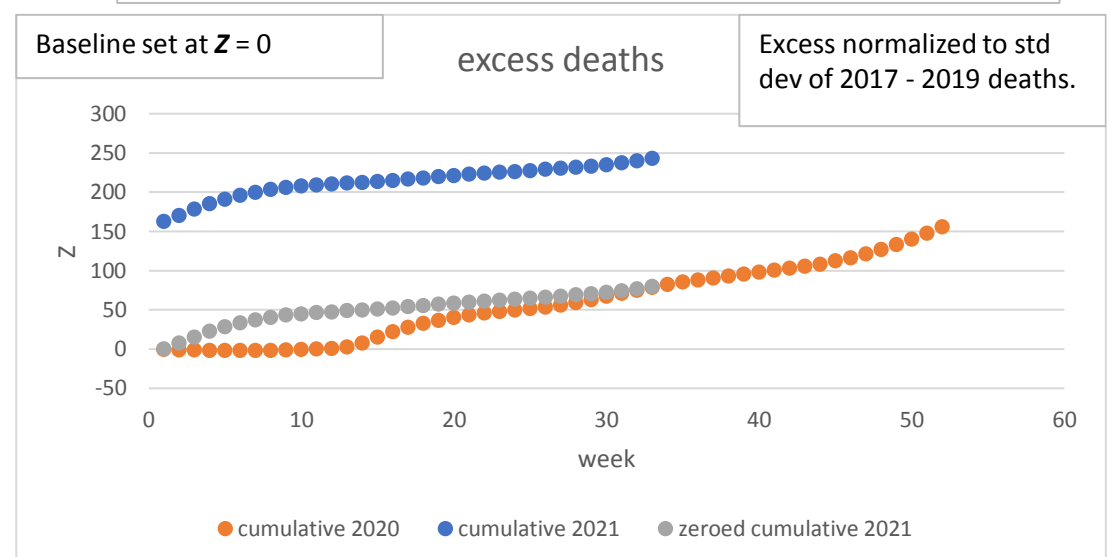


### Excess deaths as a Z score:

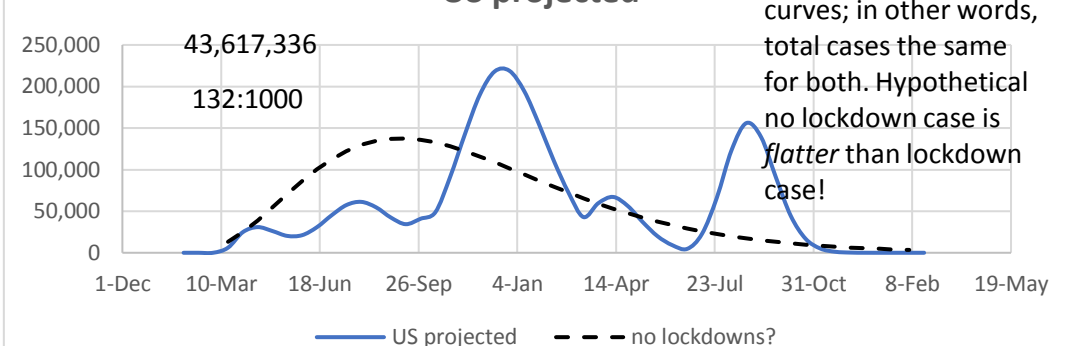


Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.

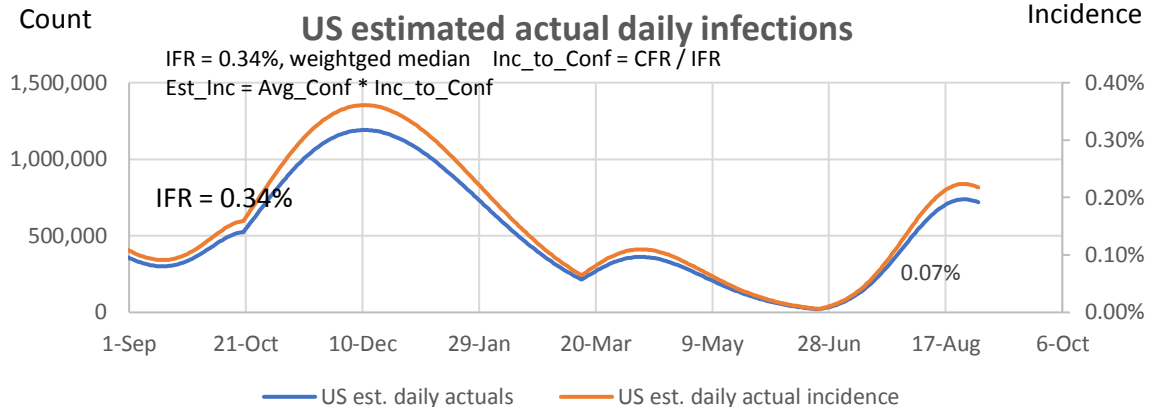
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely



### 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% X 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%

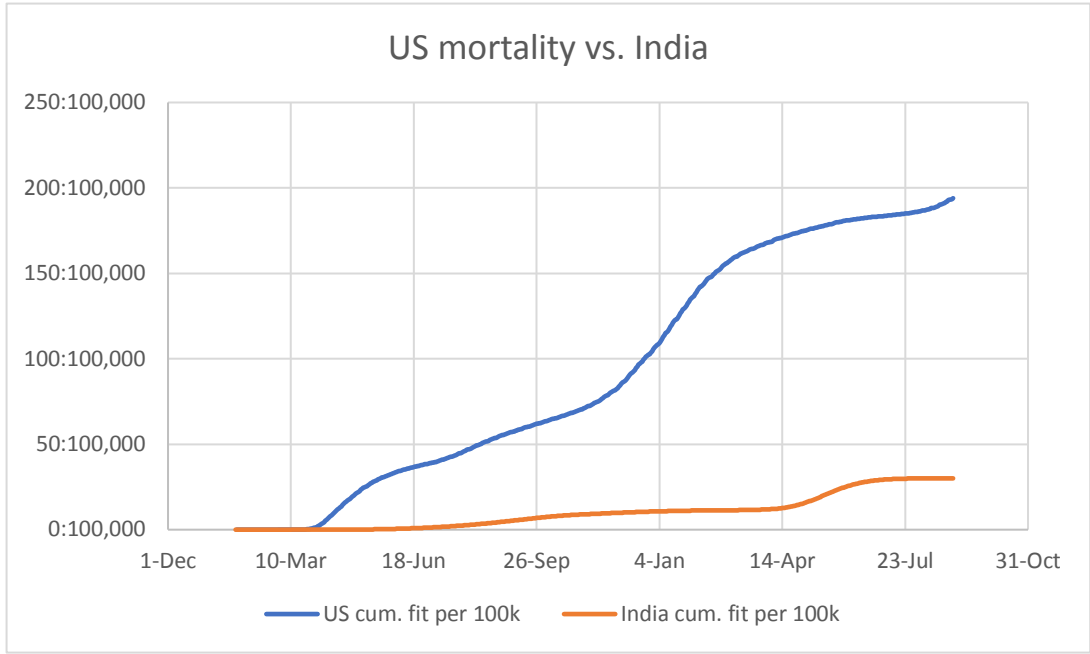
False pos. is more than half of total positives.

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>

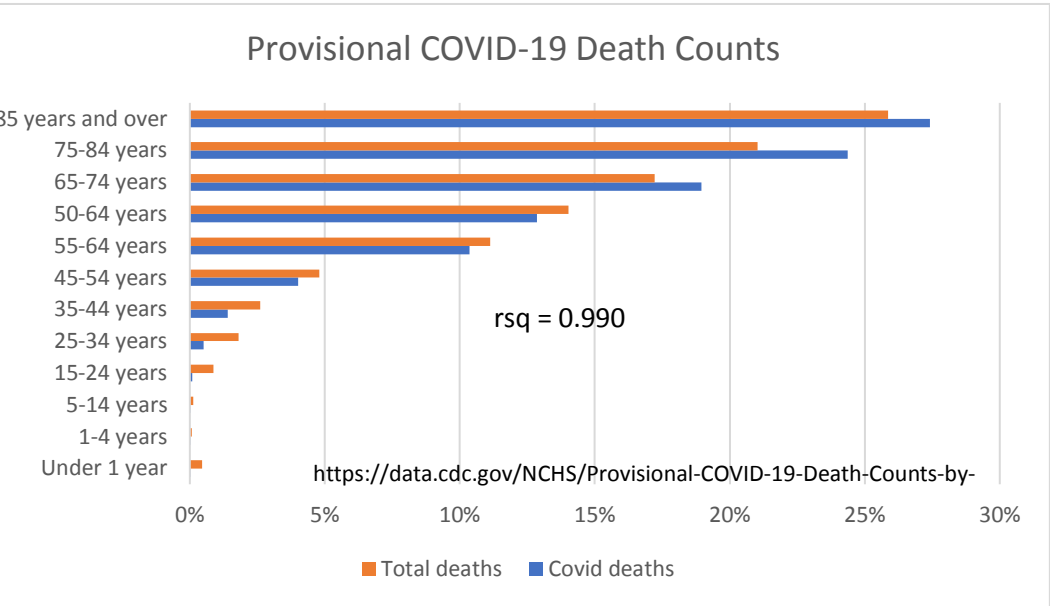
### USA Excess Deaths to date (from CDC data):

34 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	556:100,000	556:100,000	-
2021	654:100,000	572:100,000	-
Diff.	98:100,000	16:100,000	82:100,000

3 yr average
859:100,000

16% of All-Cause excess deaths are non-CV19

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

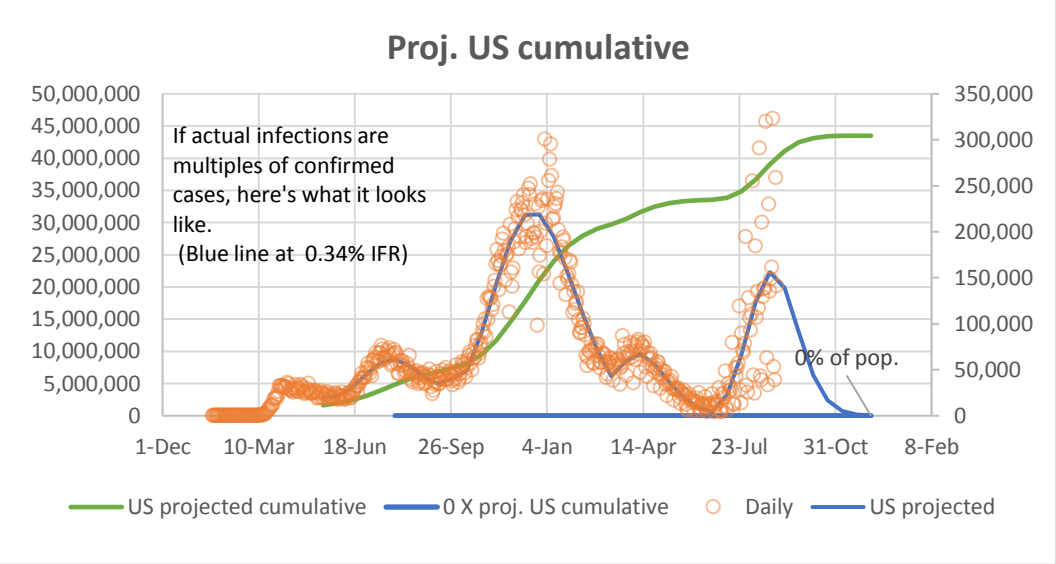


$$K = 0.318 \quad R_o : \quad R :$$

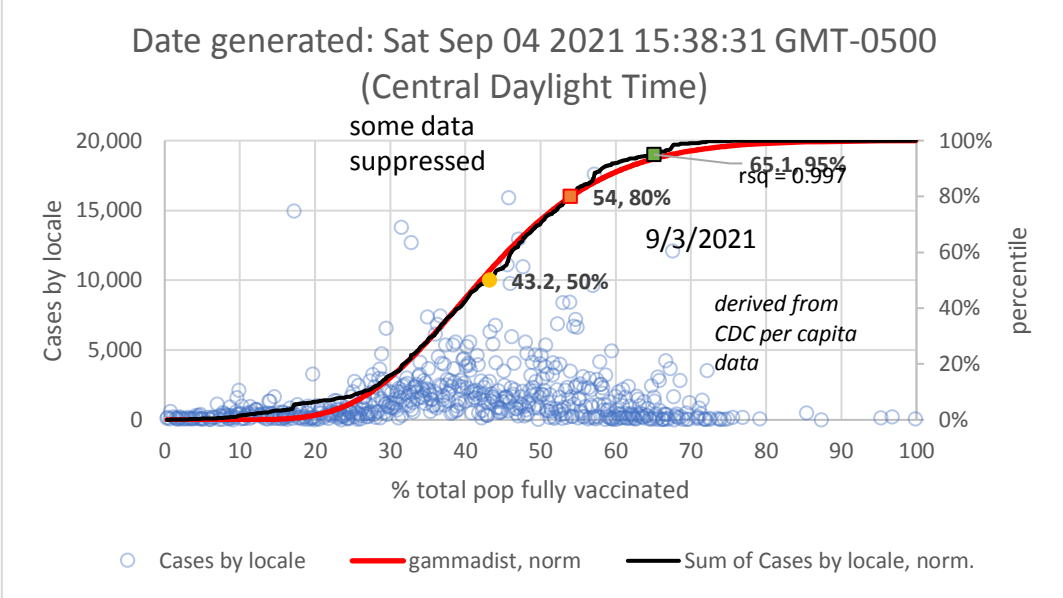
$$\text{gamma} = 0.171 \quad R_o = \exp(K/\text{gamma}) = 6.42 \quad 84\%$$

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

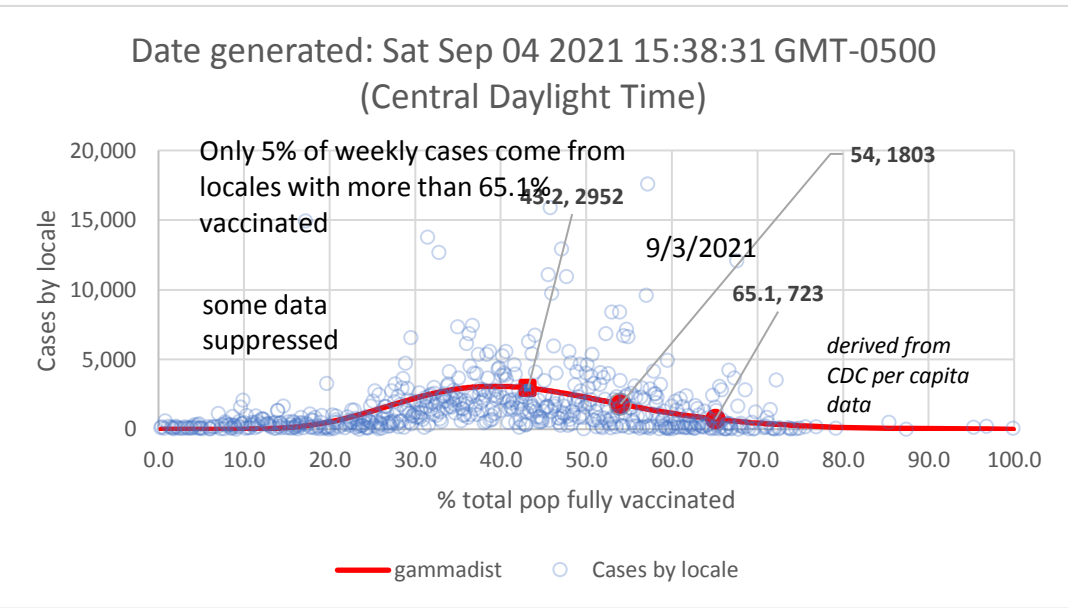
$R$  is recovered variable.



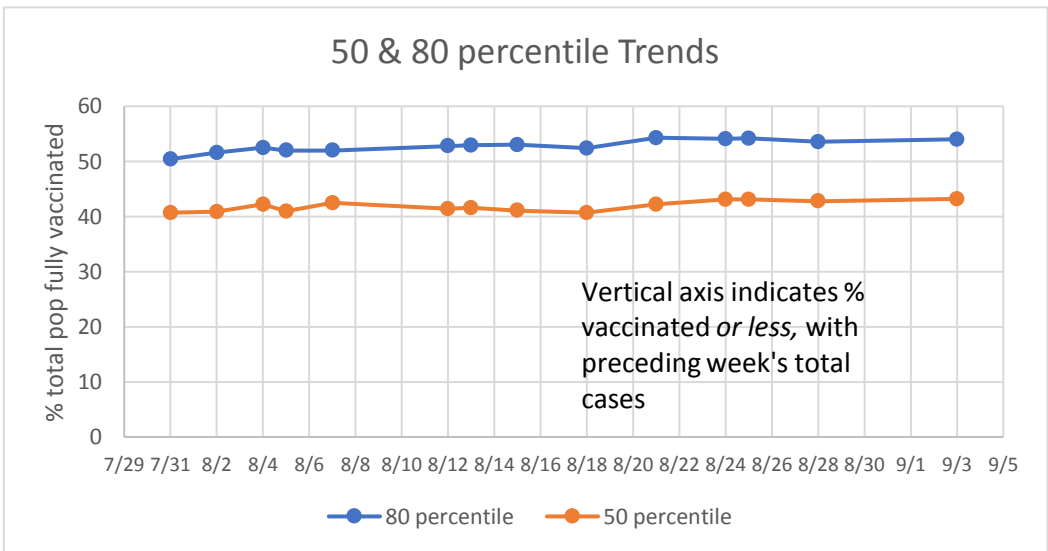
### CDC county data on week indicated new cases, by % fully vaccinated.



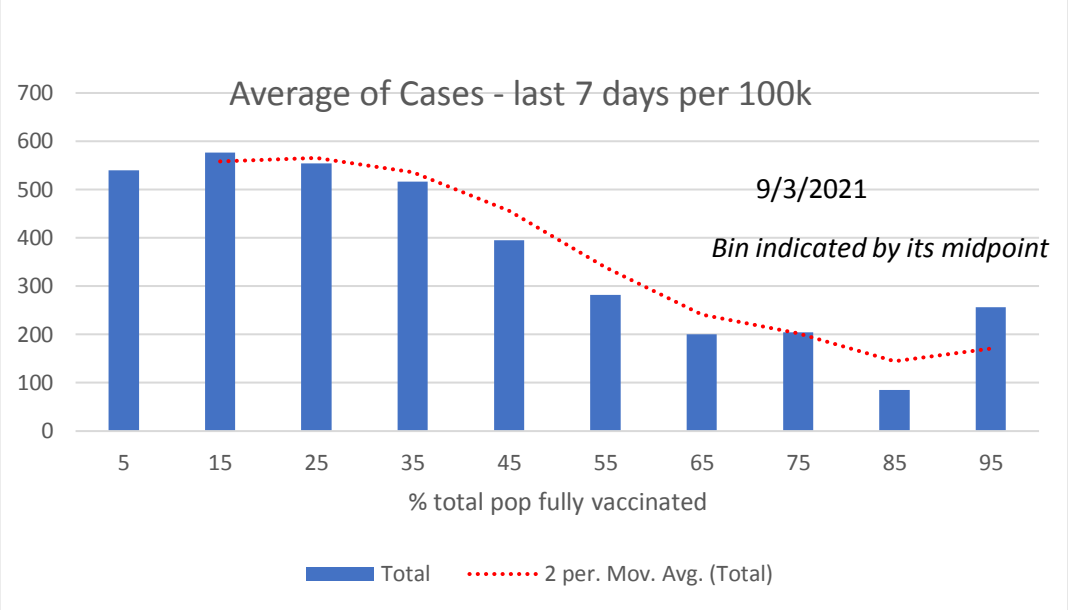
### Estimates of Cases per 100k

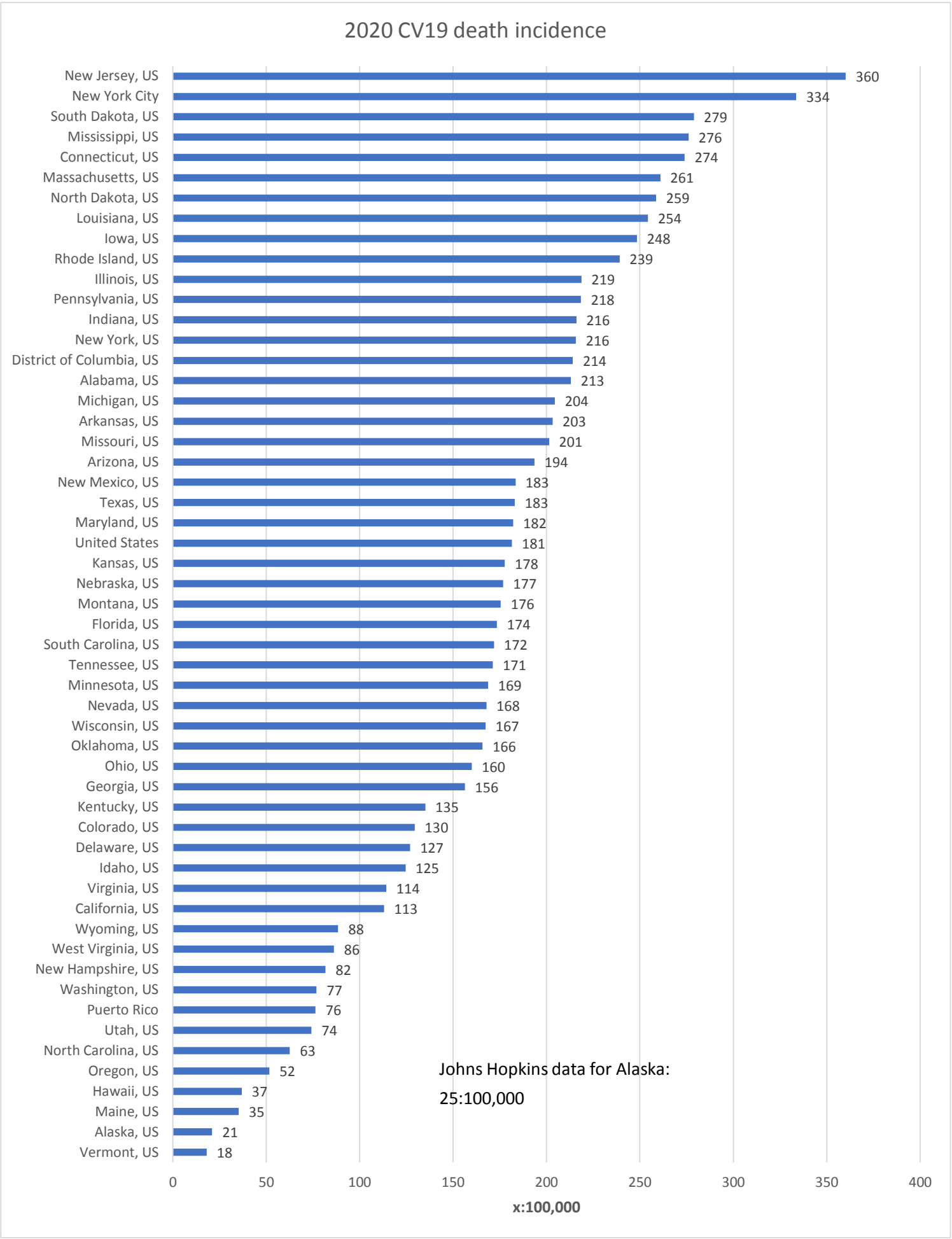


reporting jurisdictions is not a uniform distribution; some data suppressed, for example Texas



<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>