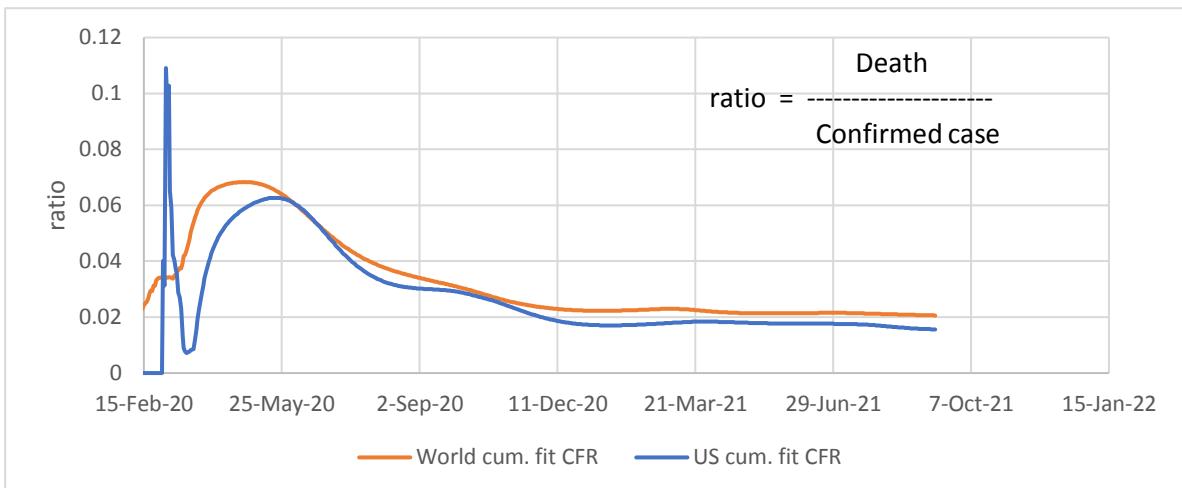
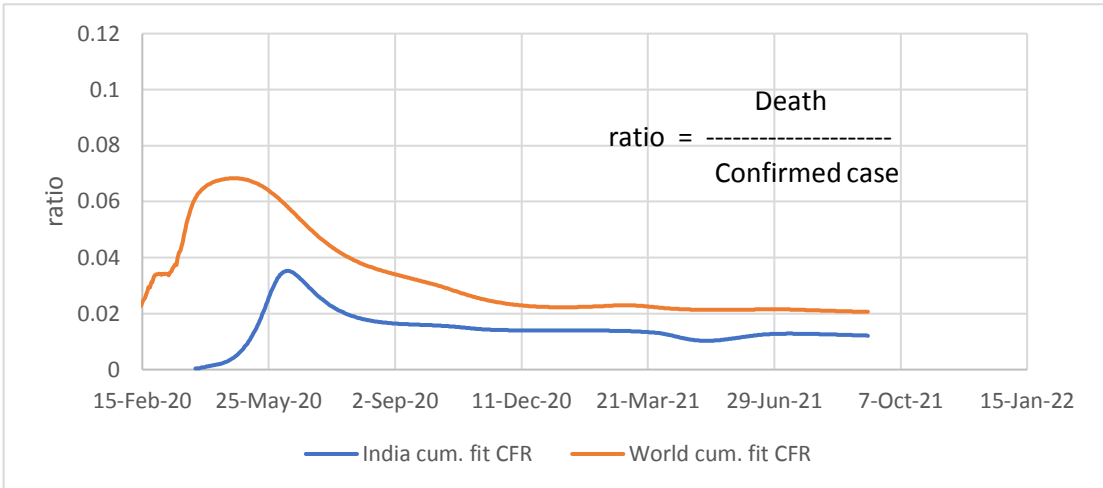
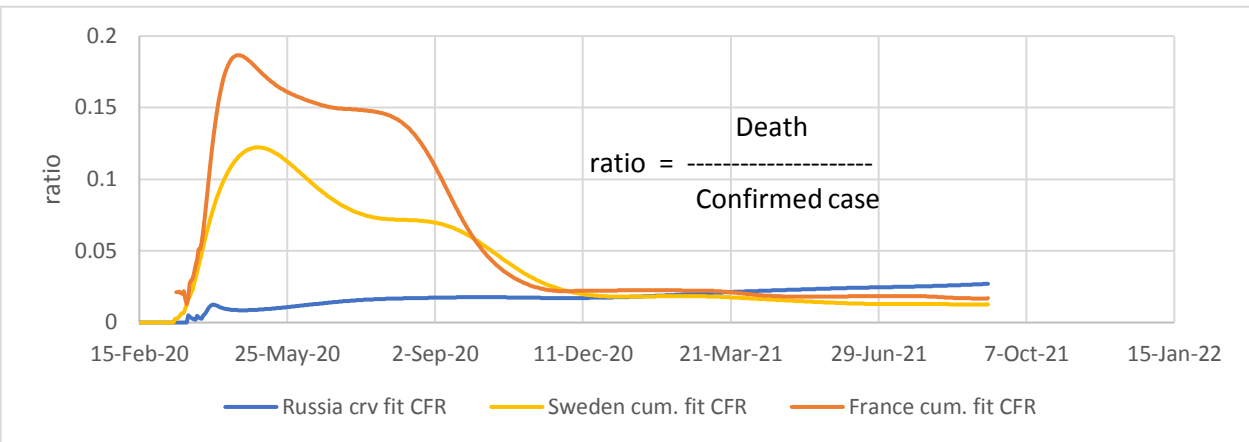
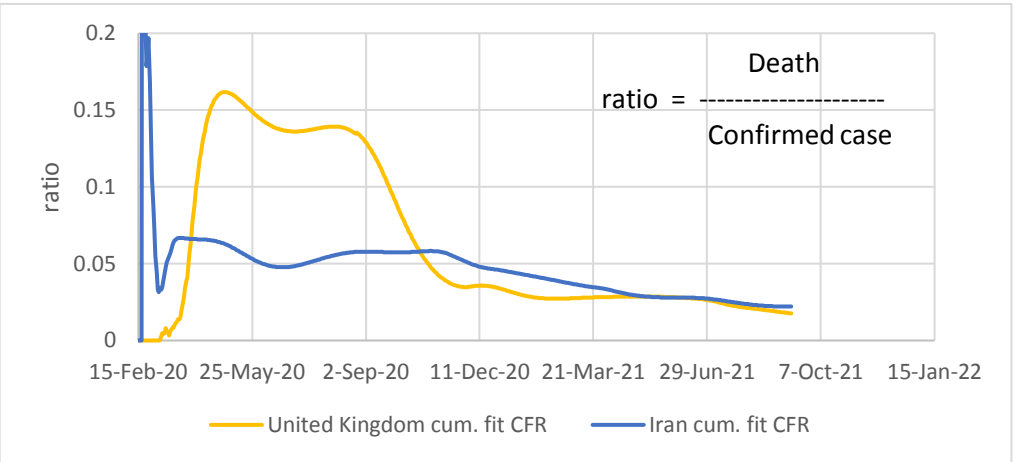
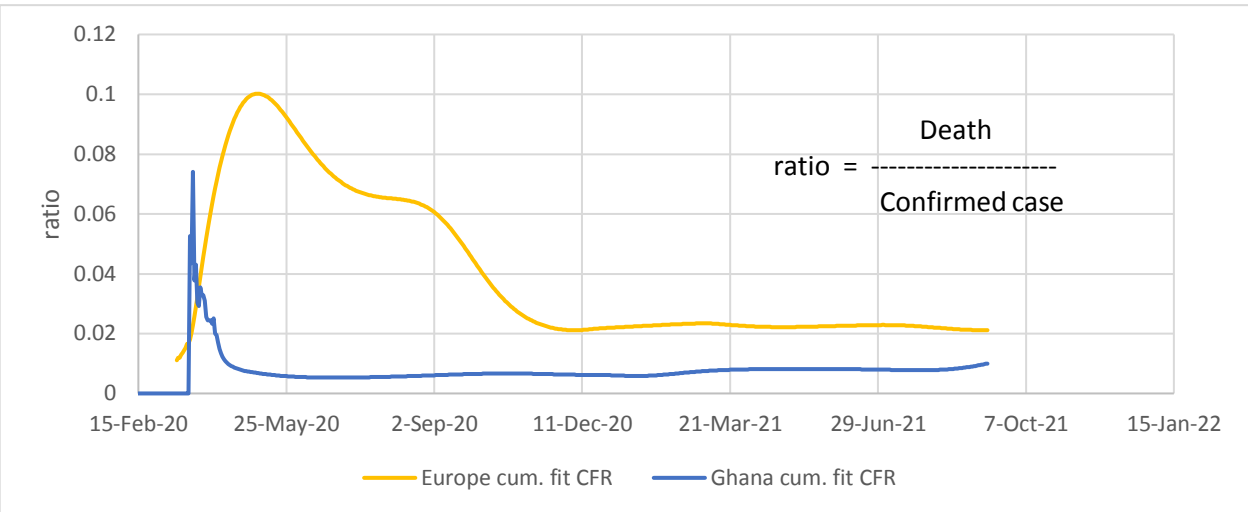
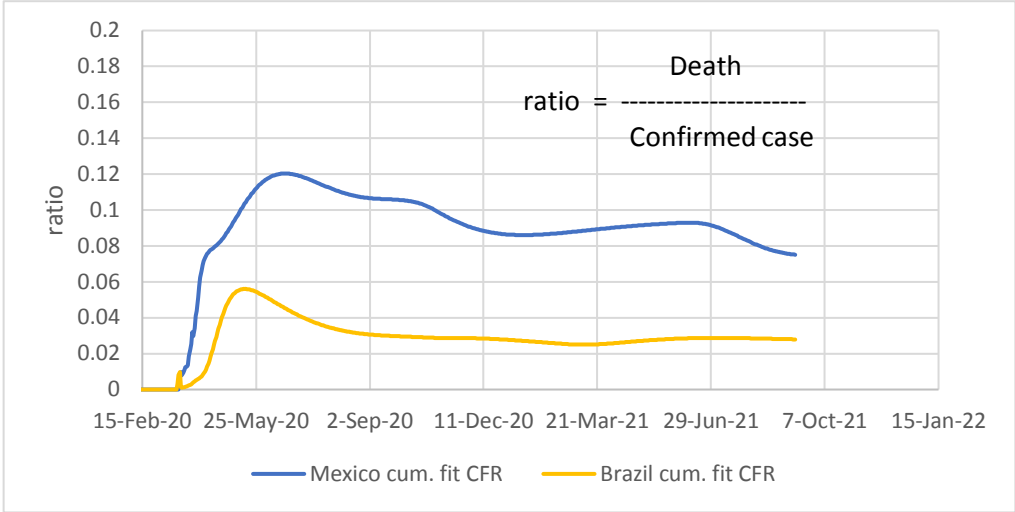
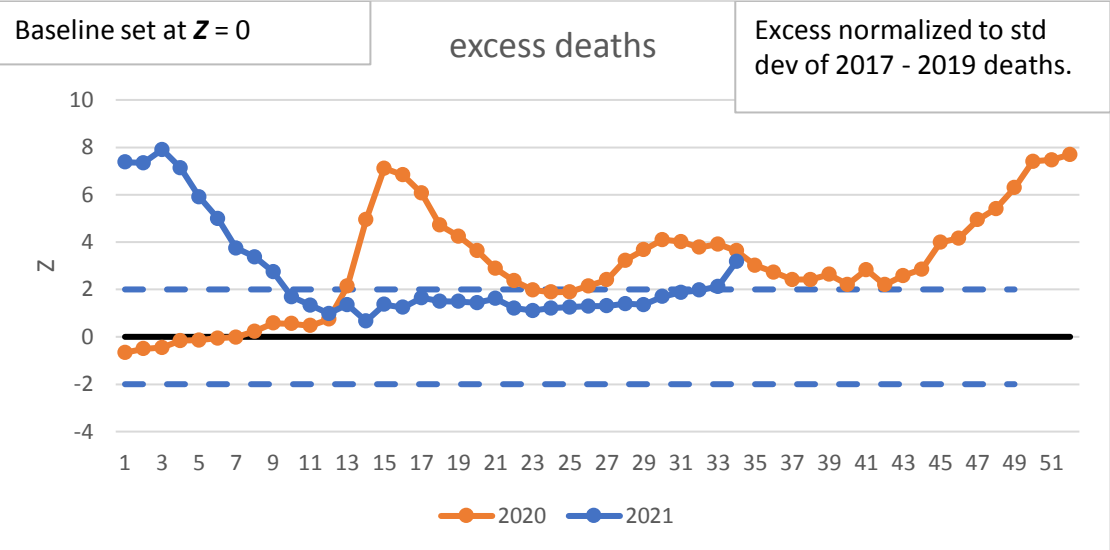


Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

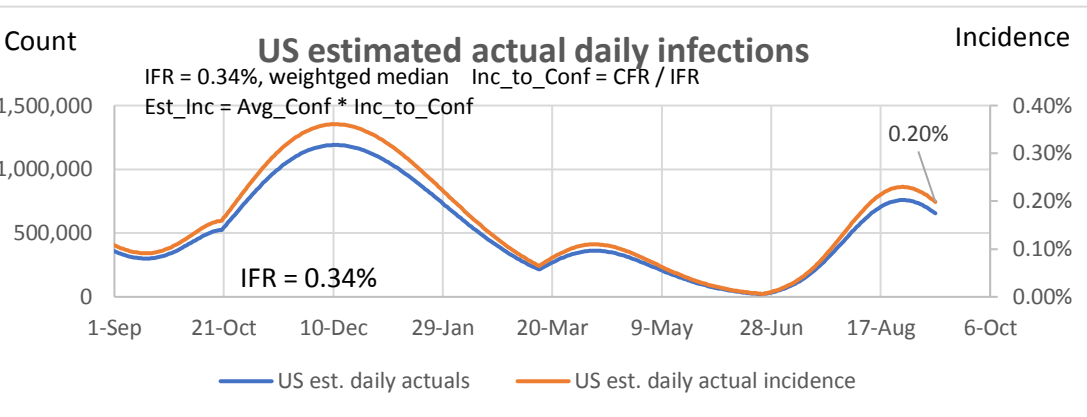
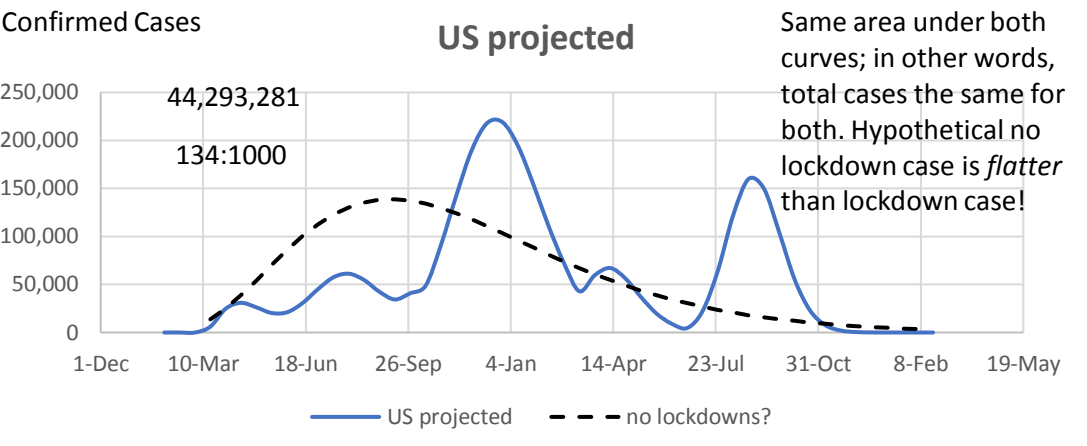
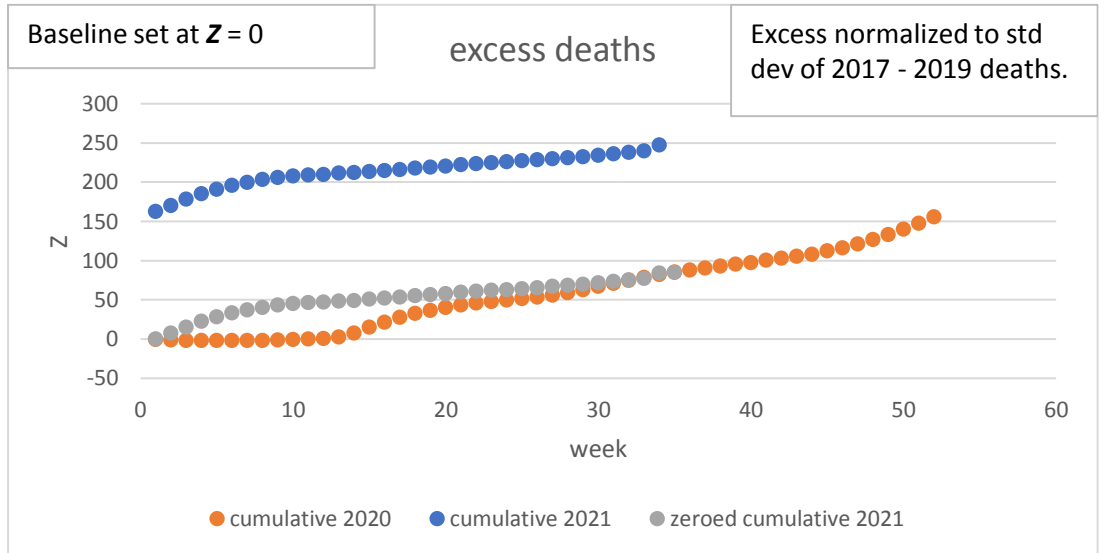


Excess deaths as a Z score:



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



False Positives Demonstration

Use 0.20% as estimated daily incidence

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

	95% accuracy of test	
	Positive	Negative
test pos	2.660%	4.860%
test neg	0.140%	92.340%
	2.800%	97.200%

False pos. is more than half of total positives.

TRUE +	2.66%/7.52%	35.4%
FALSE +	4.86%/7.52%	64.6%
Total	7.52%	100.00%

Sensitivity

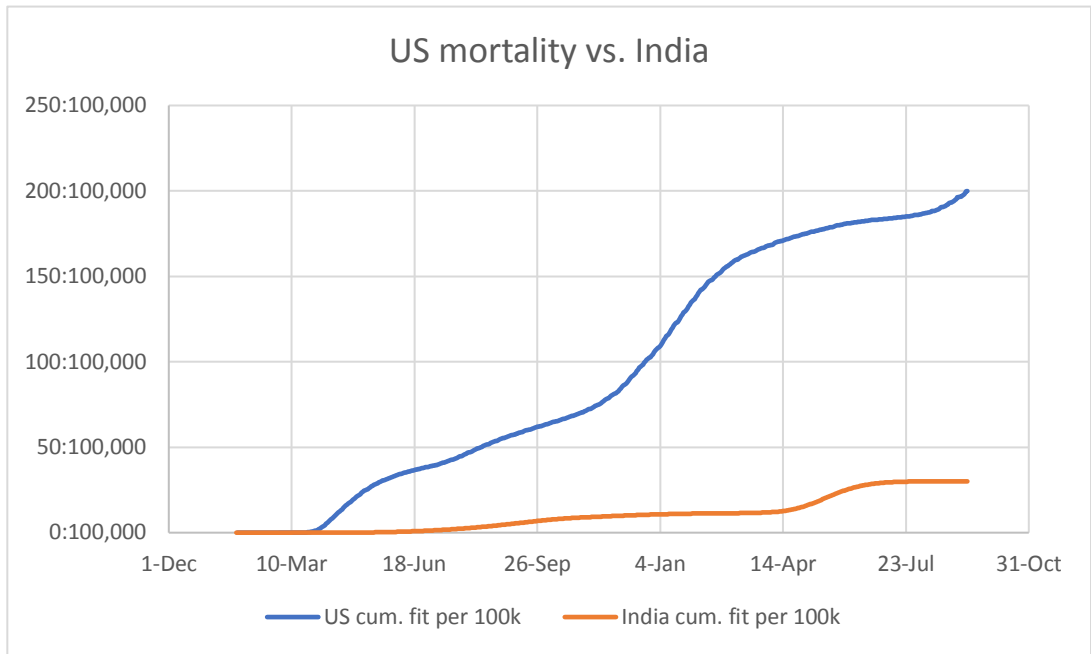
Probability of detection where condition exists

True + / (True + & False -)

Specificity

Probability of not detecting where condition doesn't exist

True - / (True - & False +)



2020			
Diff.	All Cause	All Cause, excl. CV19	CV19
3 yr average	859:100,000	859:100,000	-
859.1172727	0:100,000	905:100,000	-
n-COVID-19/xkkf-xrst/data	157:100,000	46:100,000	111:100,000

3 yr average	29% of All-Cause excess deaths are non-CV19
859:100,000	

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

2021			
35 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average	573:100,000	573:100,000	-
859.1172727	0:100,000	587:100,000	-
n-COVID-19/xkkf-xrst/data	100:100,000	14:100,000	86:100,000

3 yr average	14% of All-Cause excess deaths are non-CV19
859:100,000	

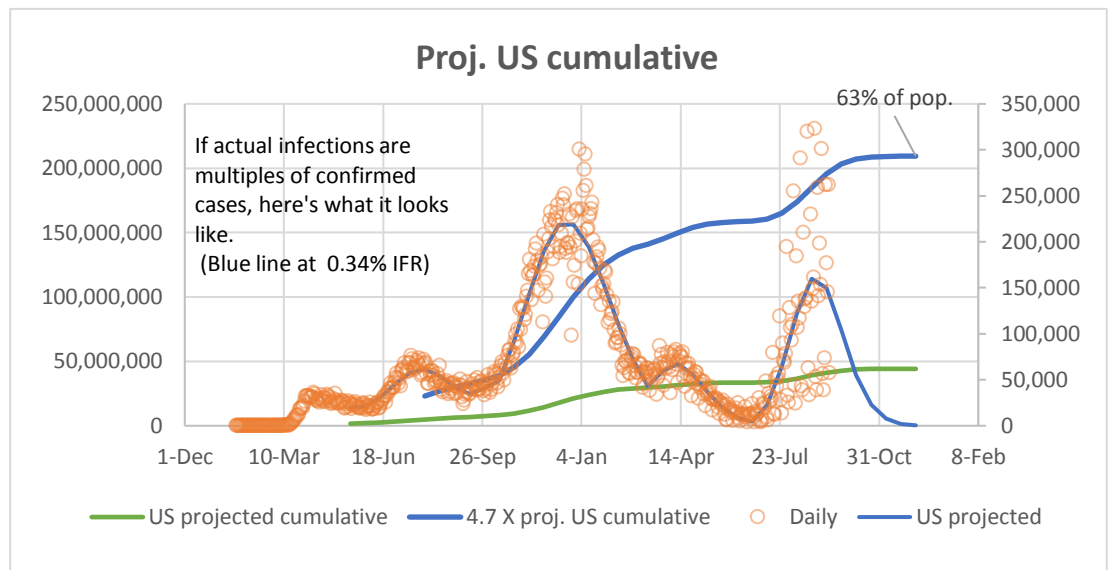
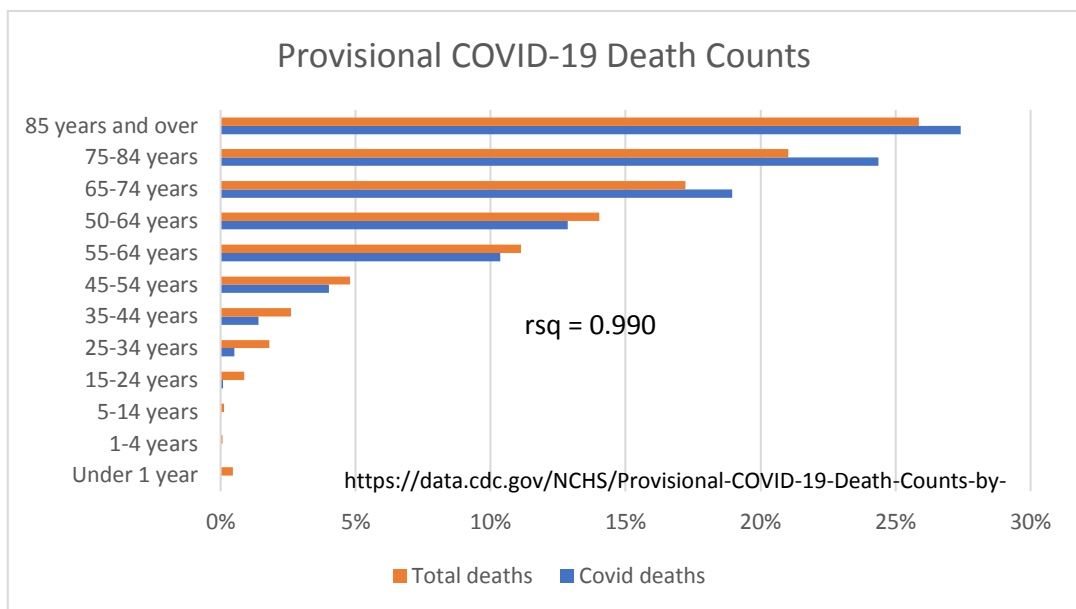
<https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data>

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

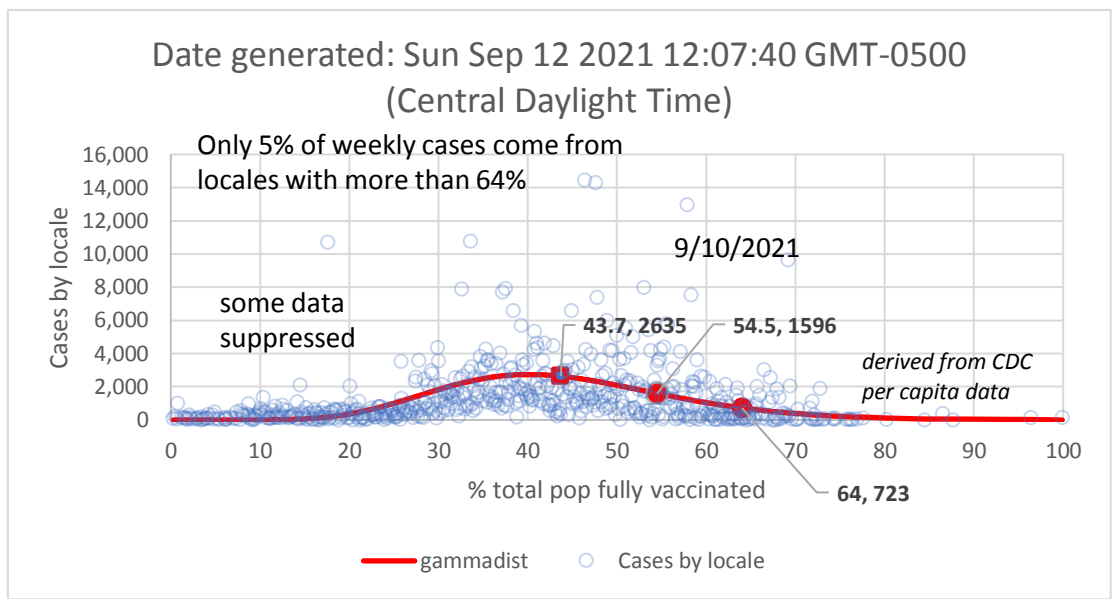
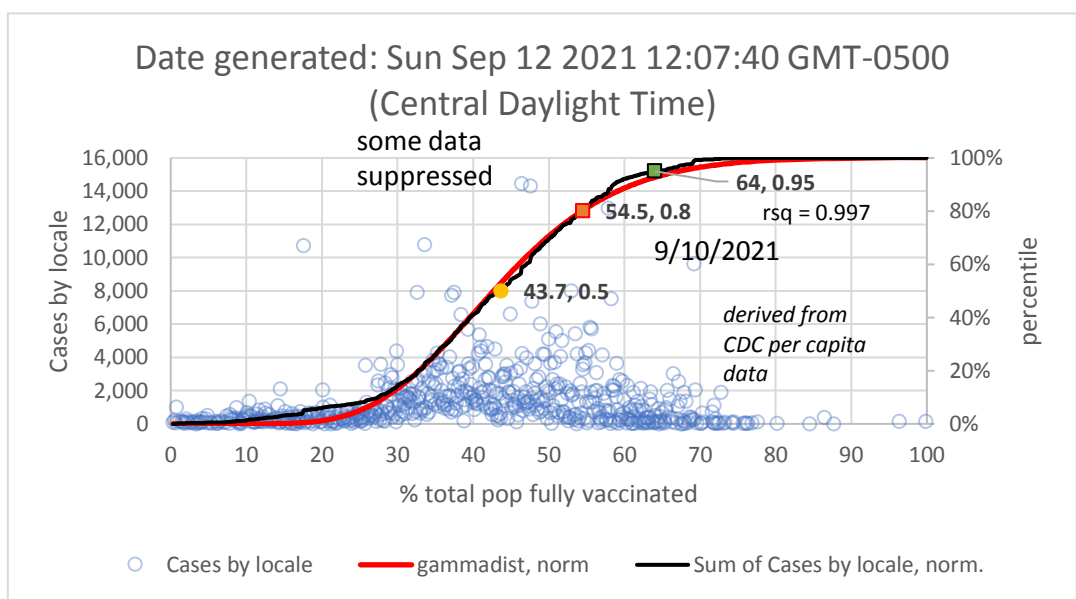
$$\text{gamma} = 0.171 \quad R_o = \exp(K/\text{gamma}) = 6.42 \quad 84\%$$

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

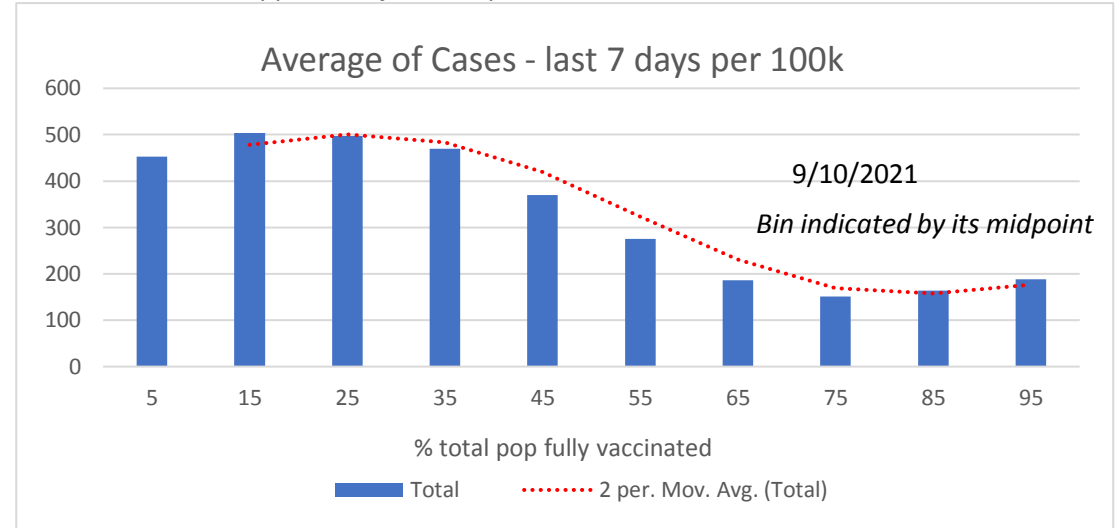
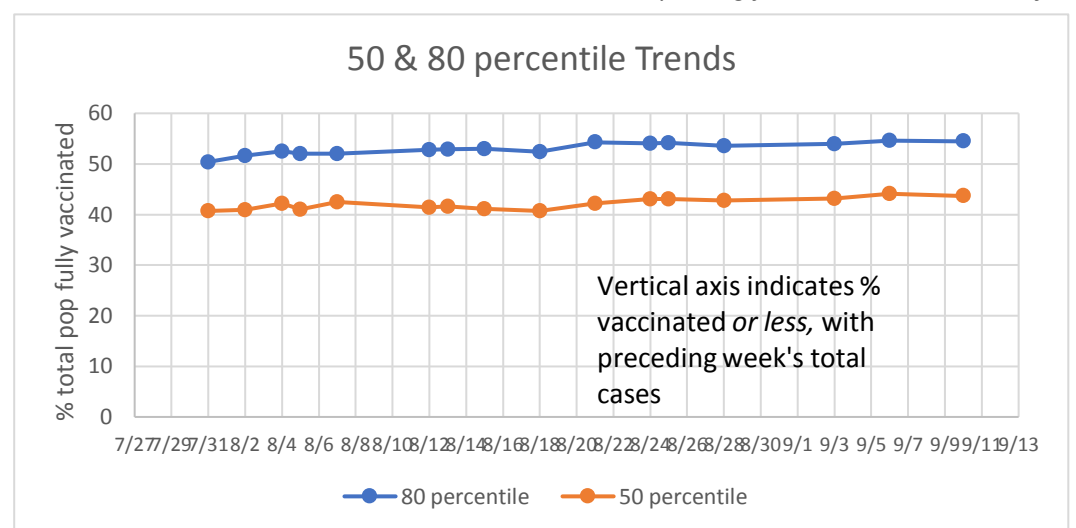
R is recovered variable.



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

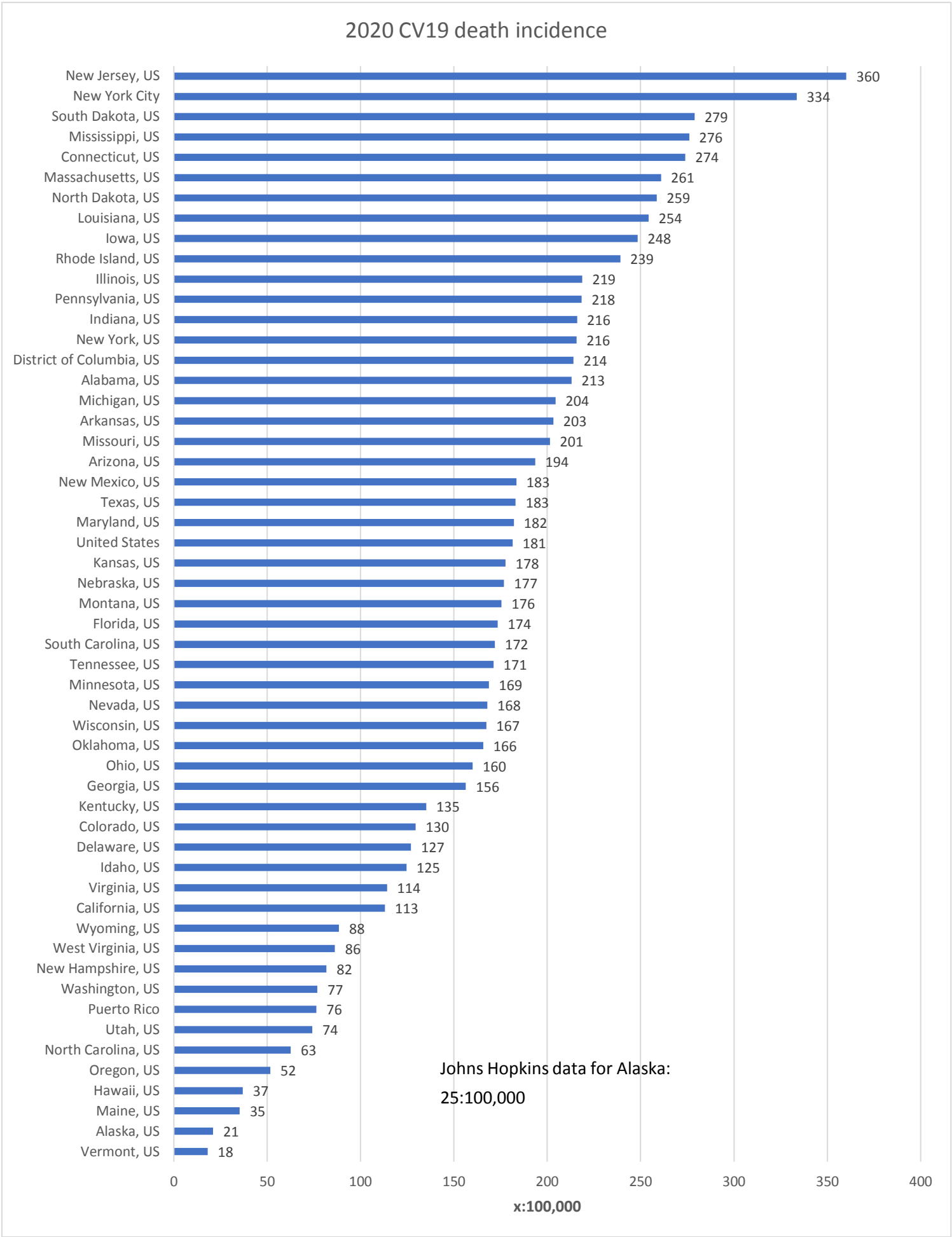


reporting jurisdictions is not a uniform distribution; some data suppressed, for example Texas



Estimates of Cases per 100k

<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>