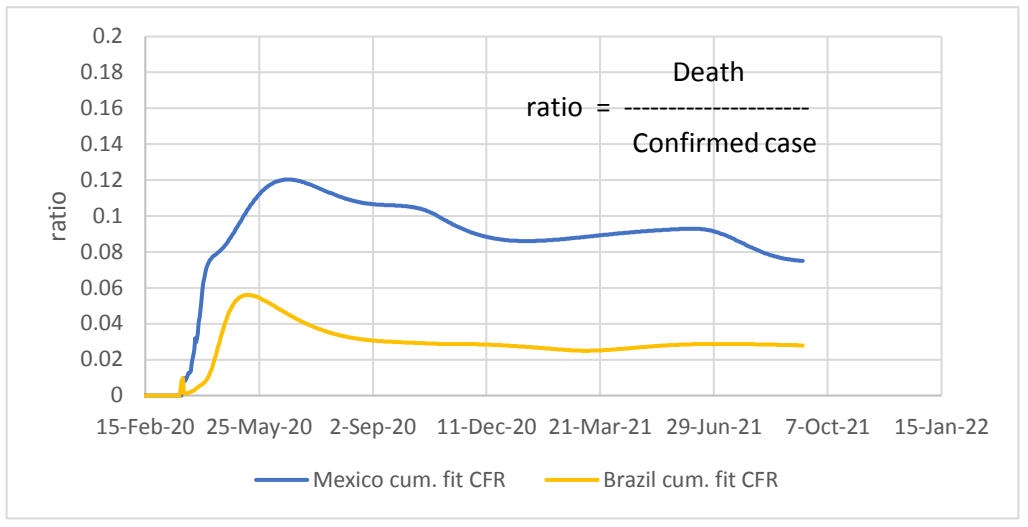
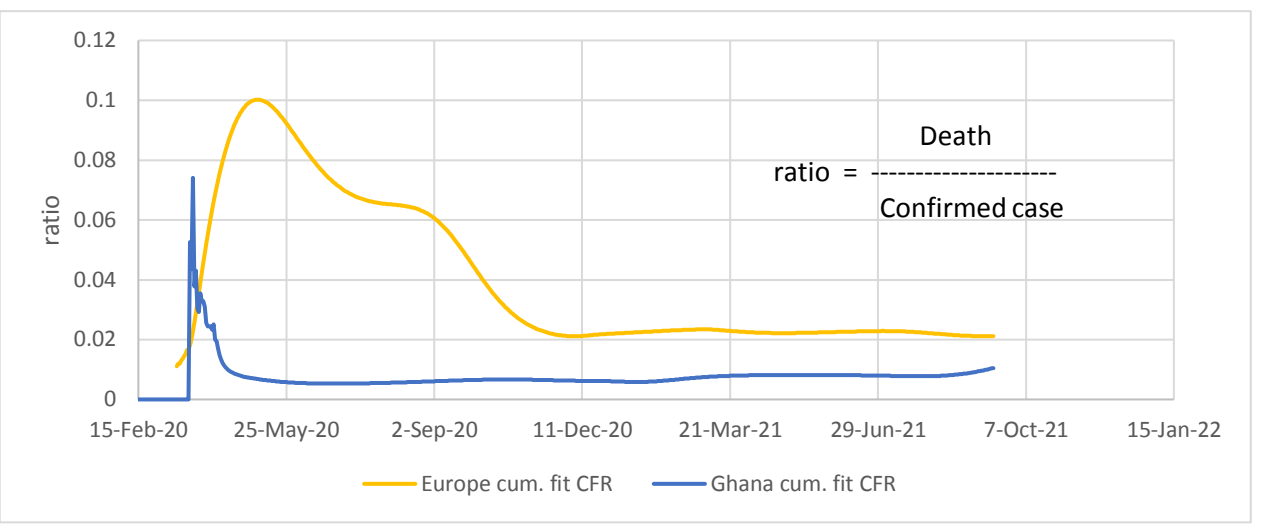
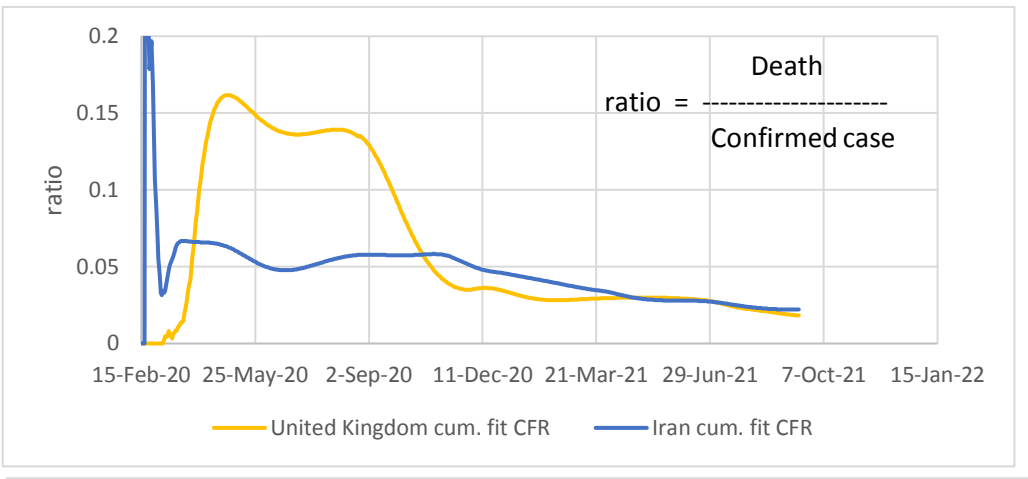
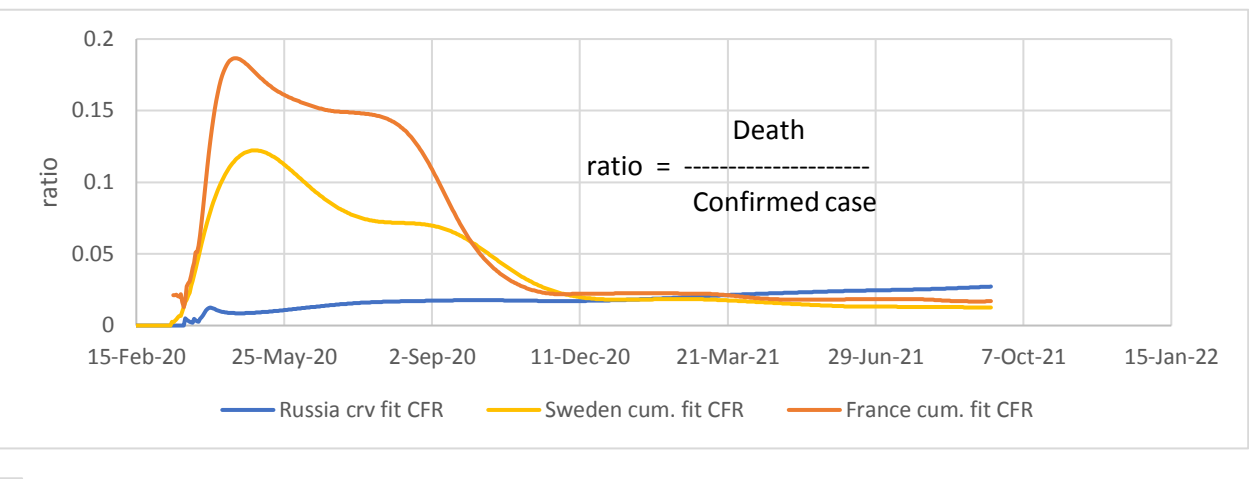
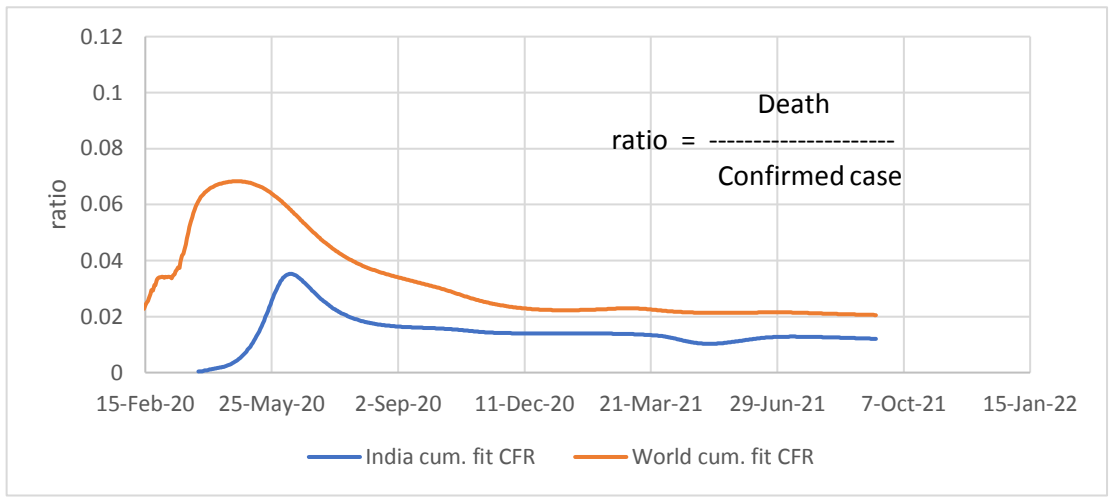
Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

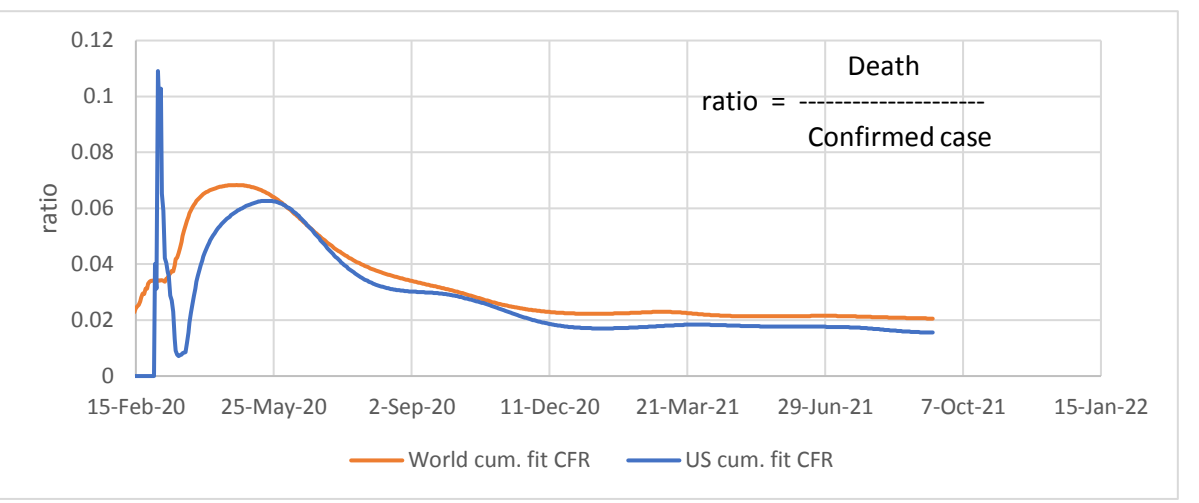




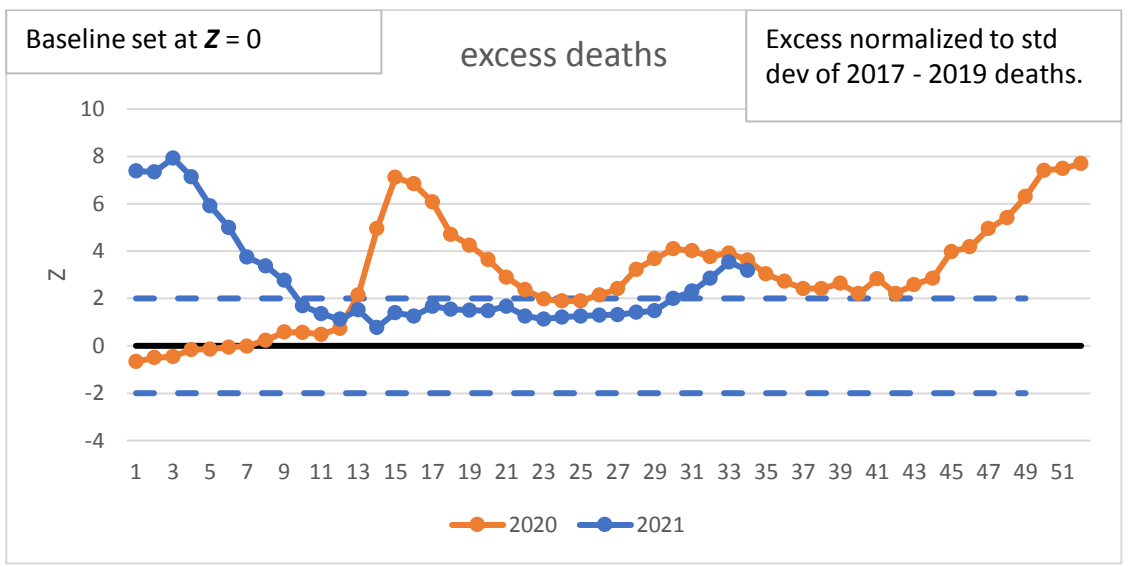


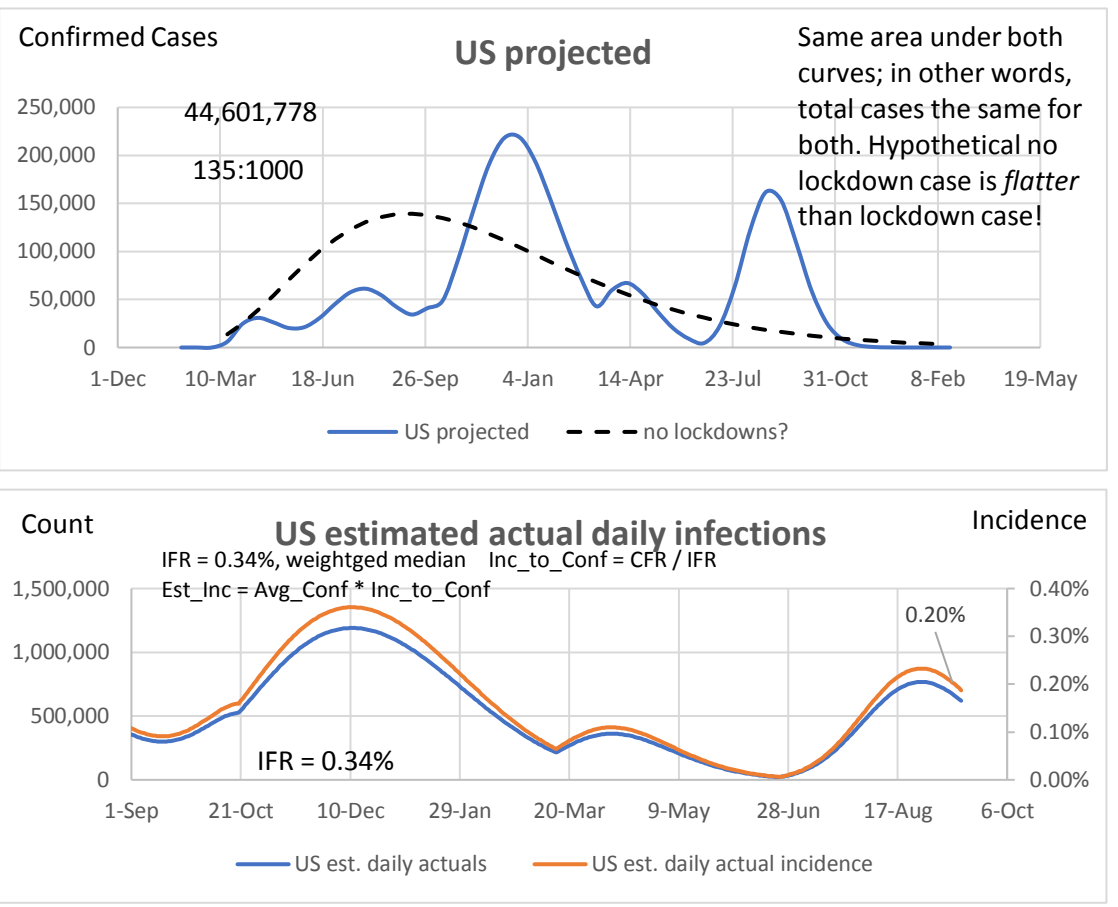






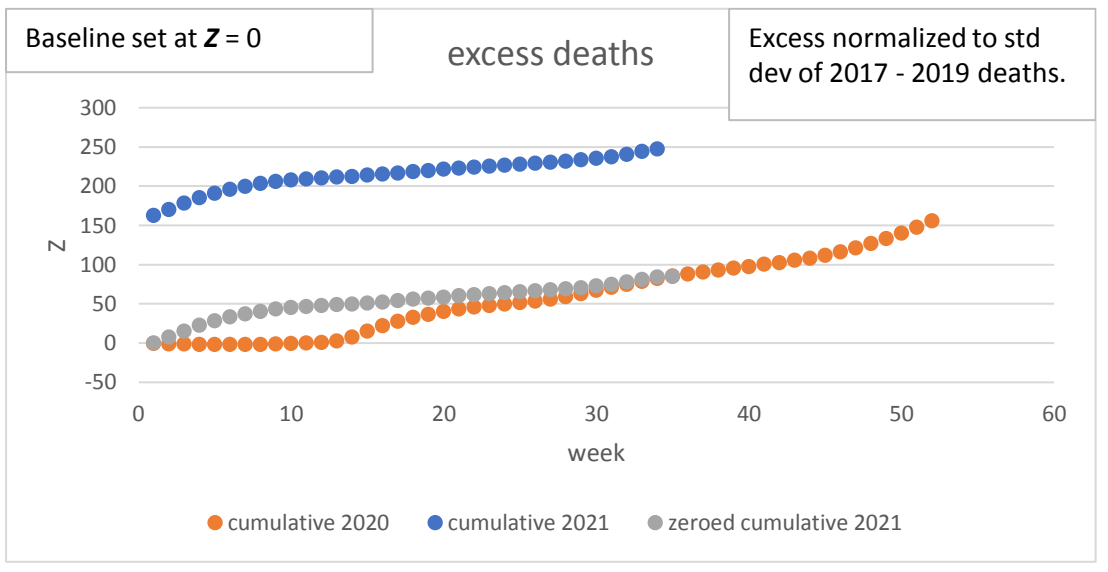
Excess deaths as a Z score:





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



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

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%	7.52%
test neg	0.140%	92.340%	92.48%
	2.800%	97.200%	100.00%

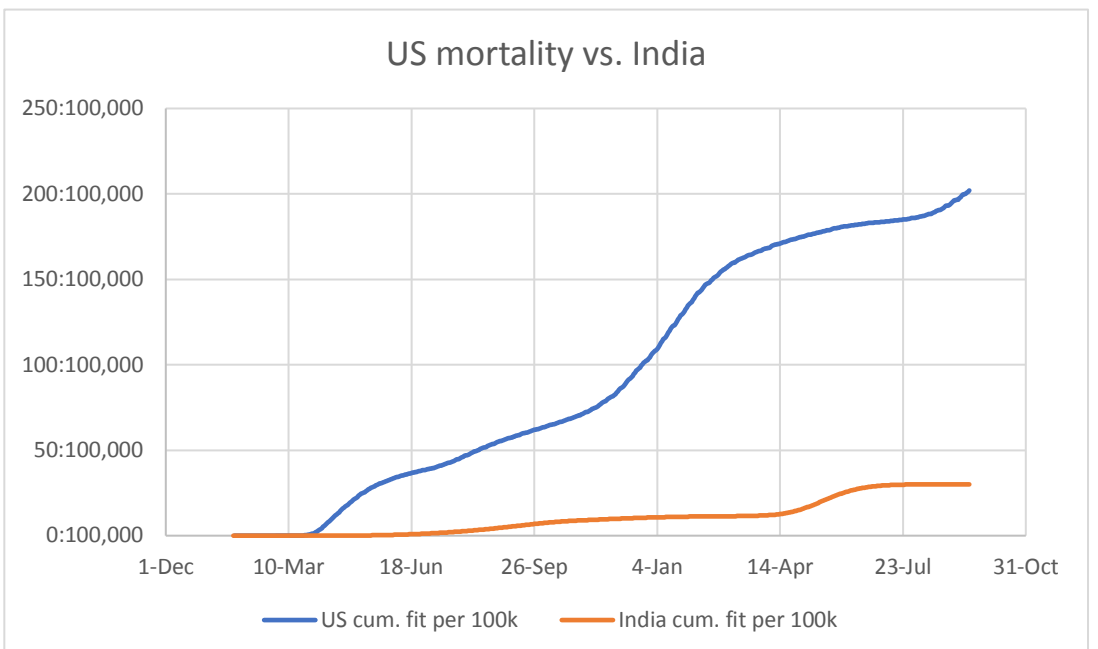
False pos. is more than half of total positives.

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

0.20% X 14 = 2.800%

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

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



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 (from CDC data):

35 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	573:100,000	573:100,000	-
2021	673:100,000	587:100,000	-
Diff.	100:100,000	14:100,000	86:100,000

3 yr average
859:100,000

14% of All-Cause excess deaths are non-CV19

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

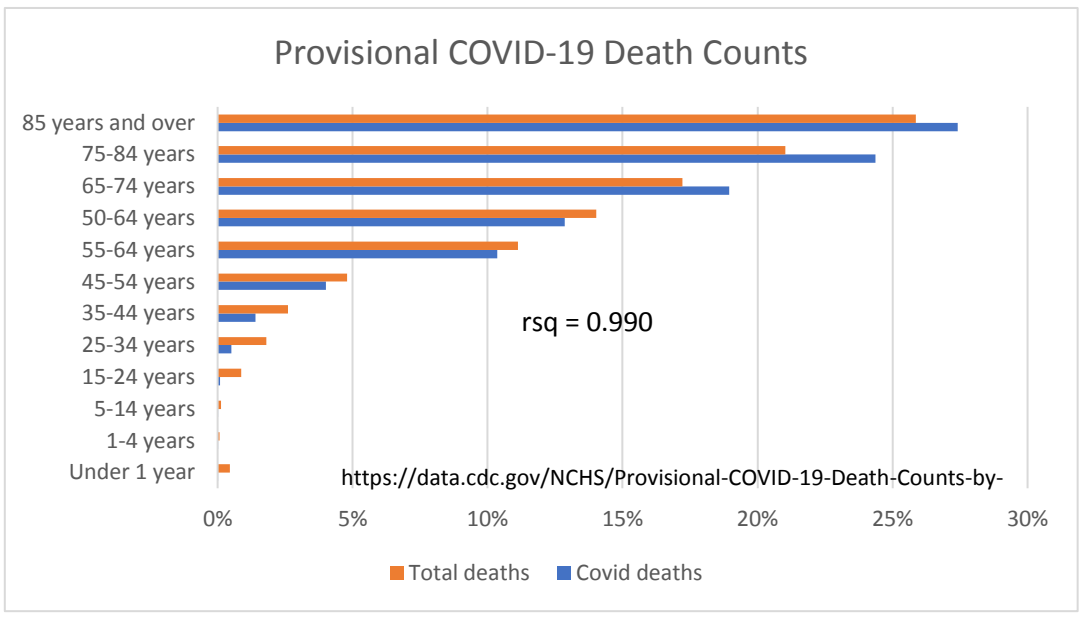
K = 0.318 R_o: R :

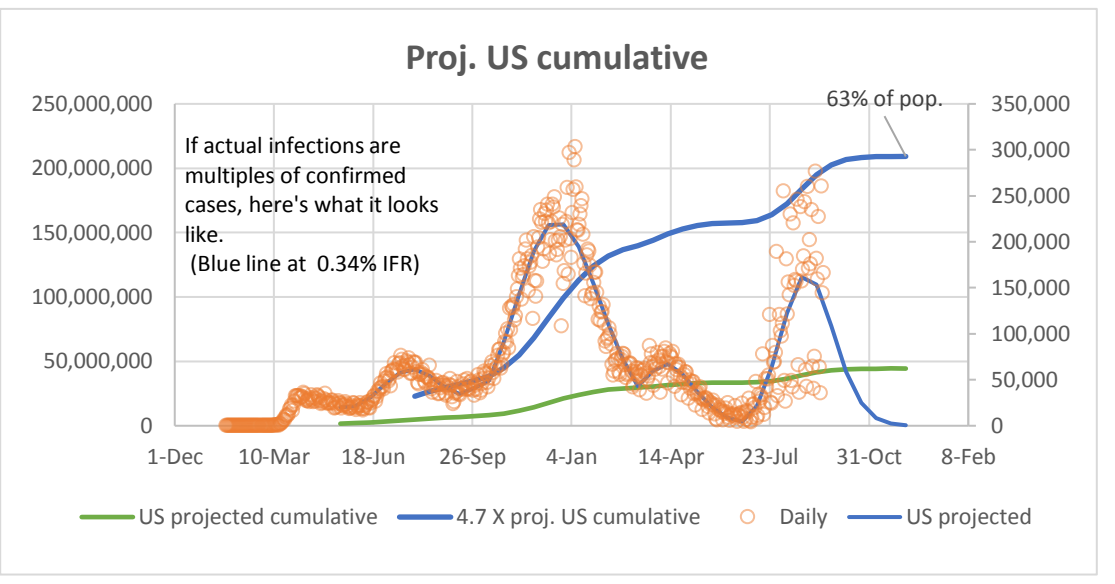
gamma = 0.171 $R_o = \exp(K/\text{gamma})$ = 6.42 84%

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

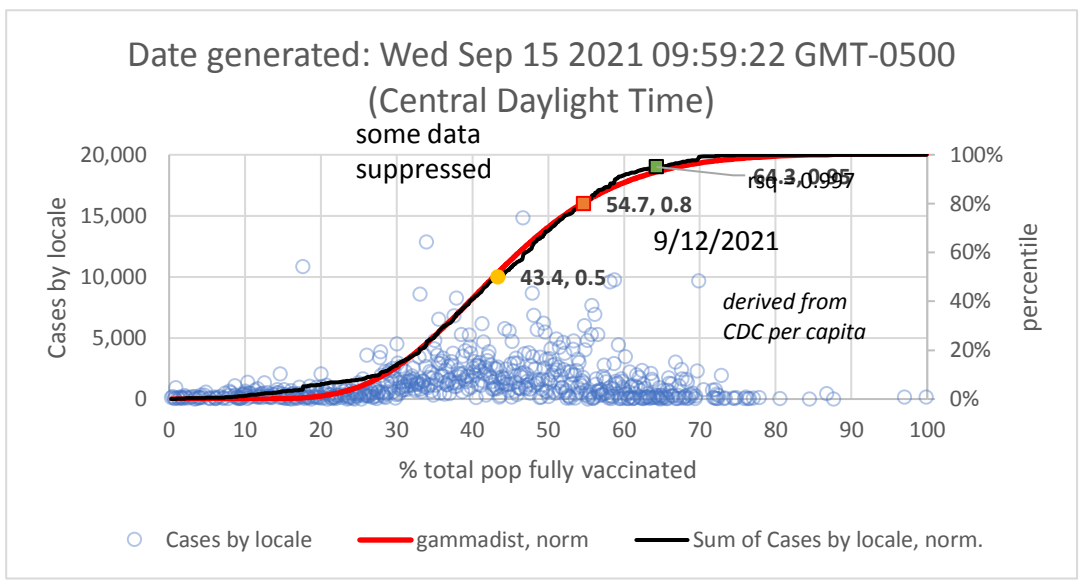
<=Herd immunity

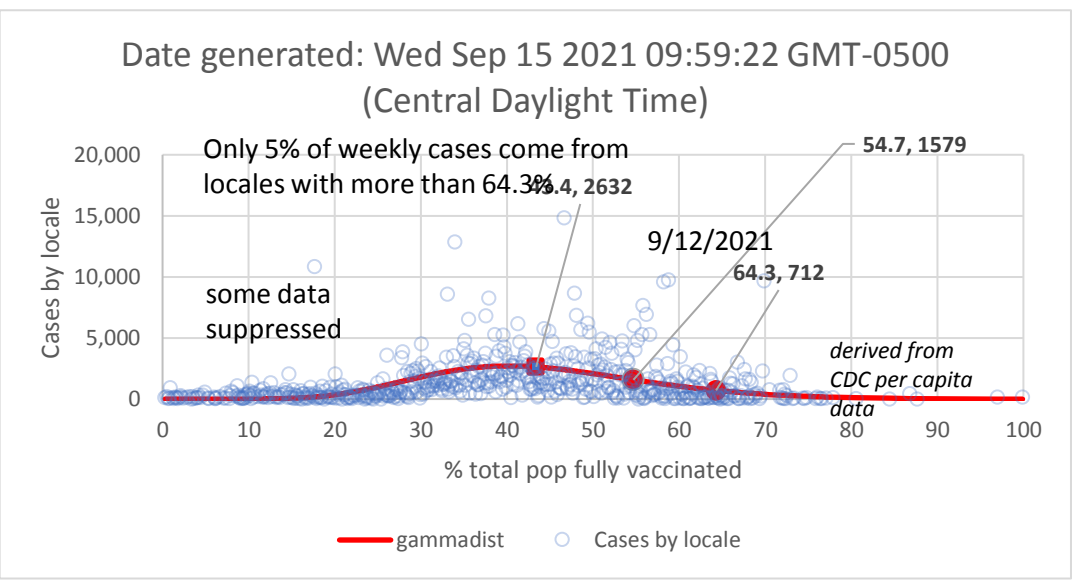
R is *recovered* variable.



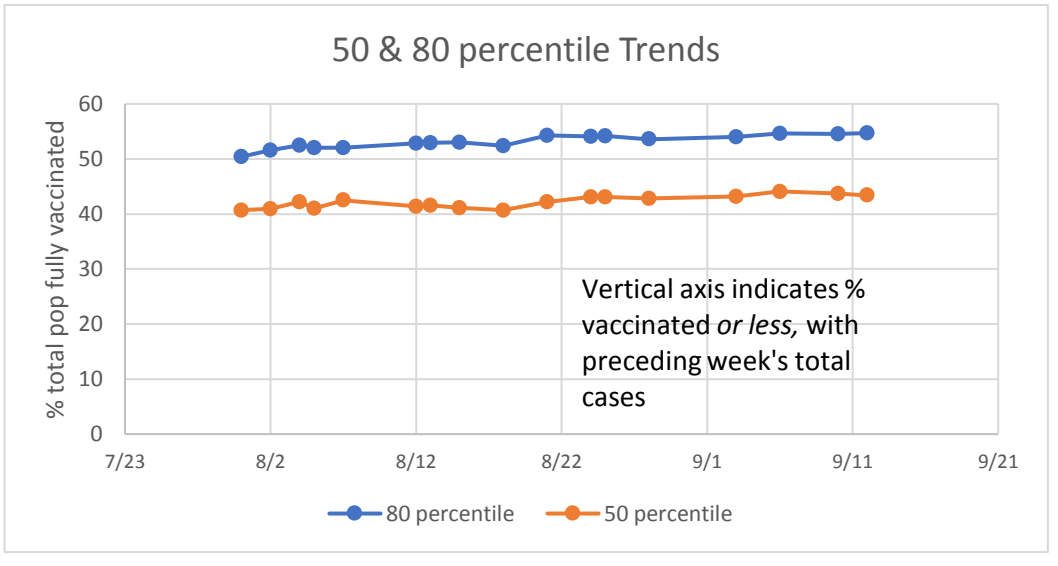


CDC county data on week indicated new cases, by % fully vaccinated.

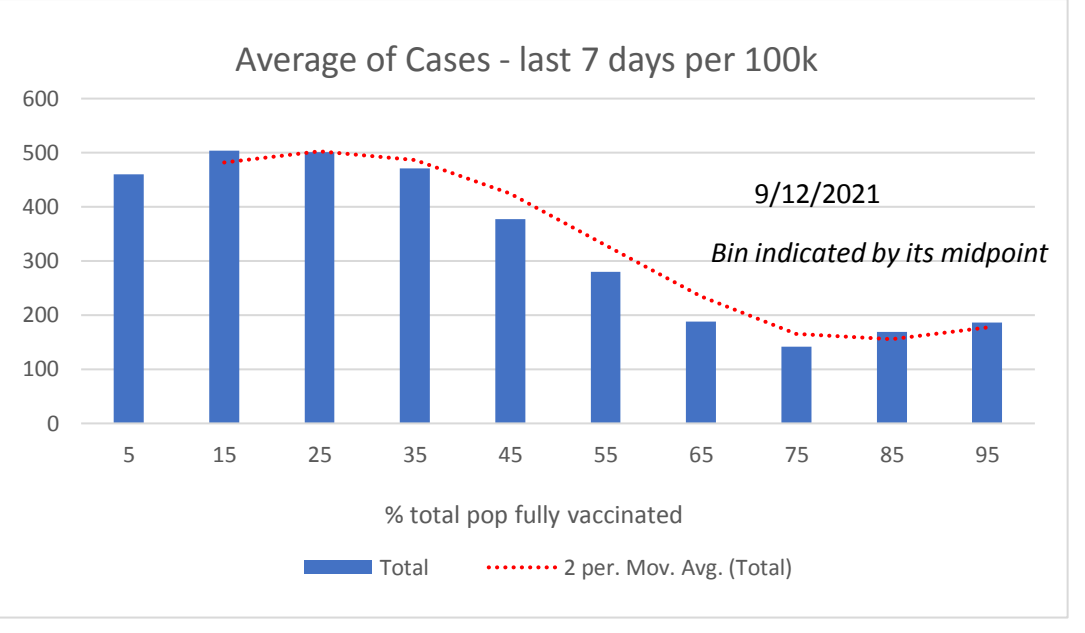


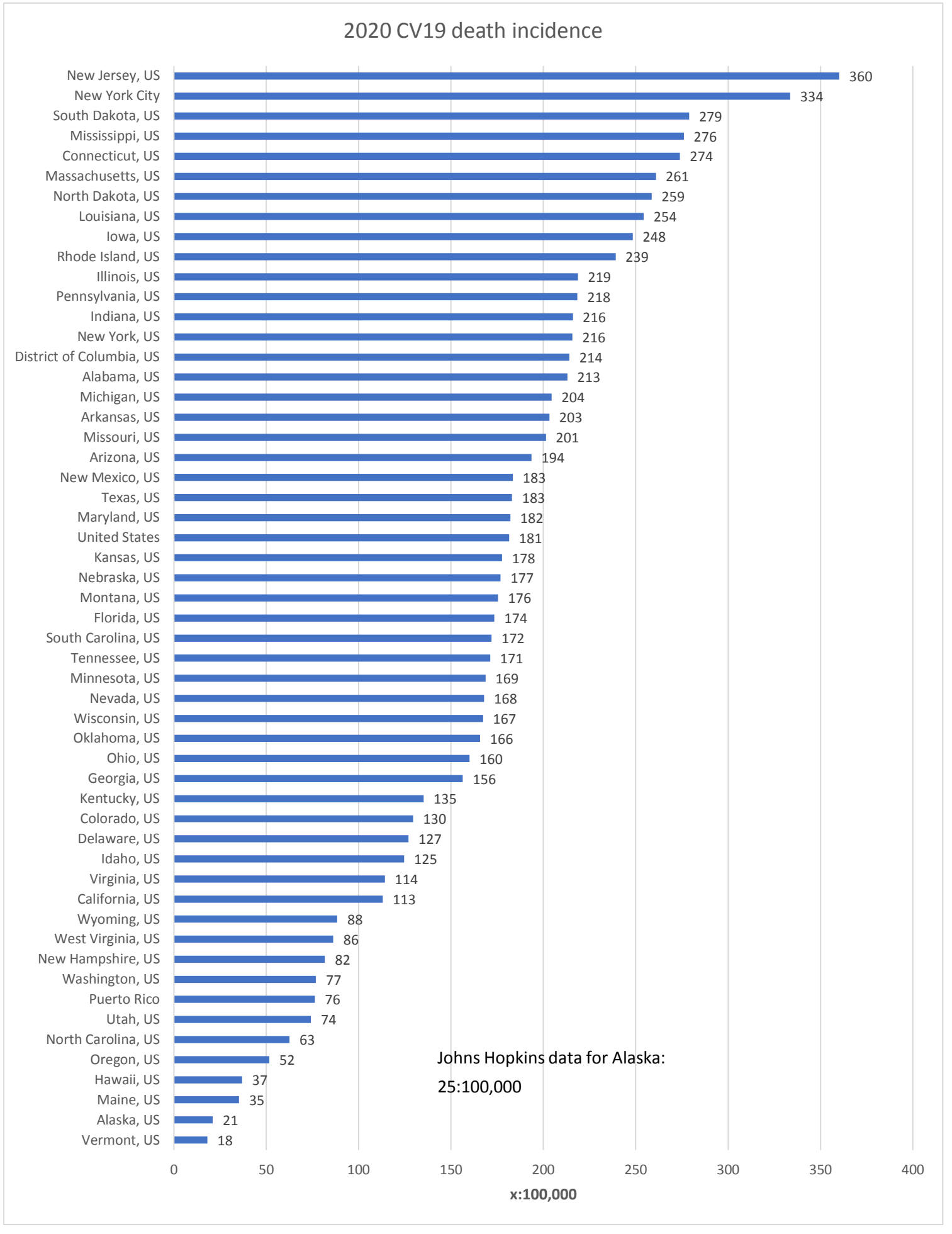


reporting jurisdictions is not a uniform distribution; some data suppressed, for example Texas



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