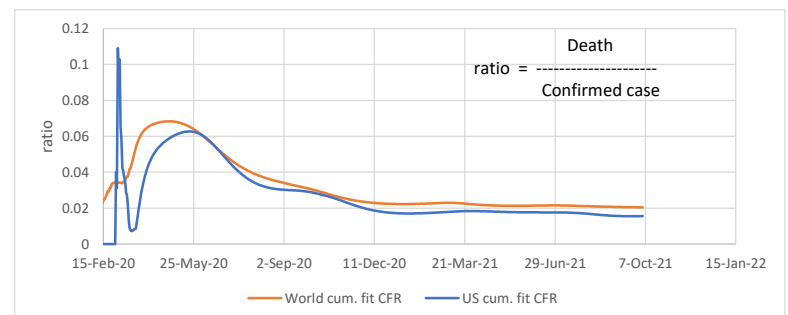
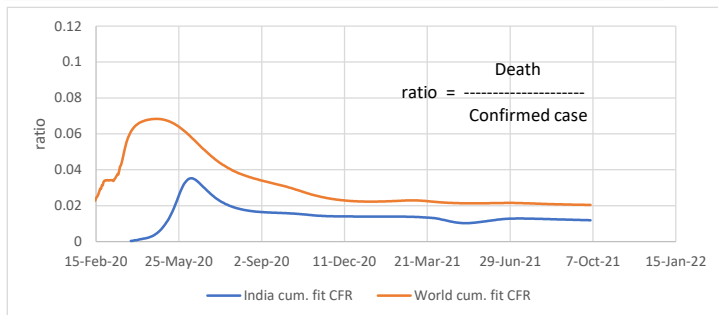
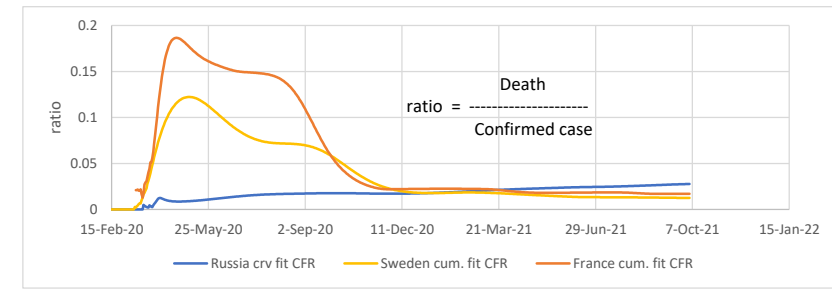
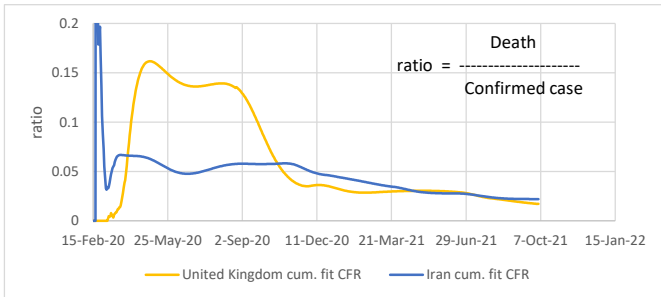
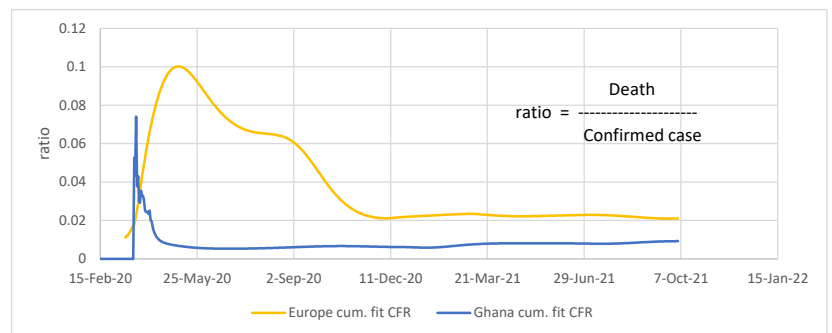
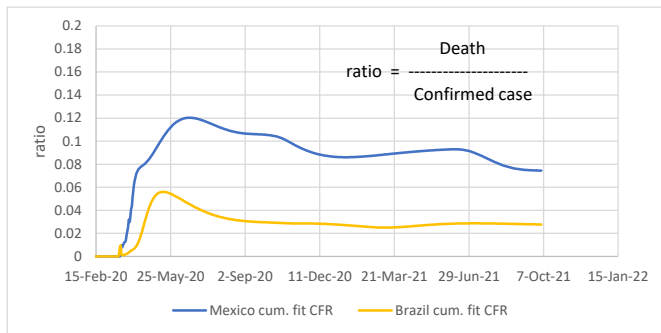
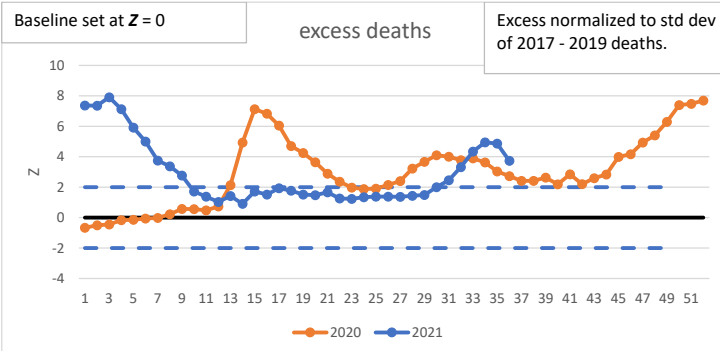


Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

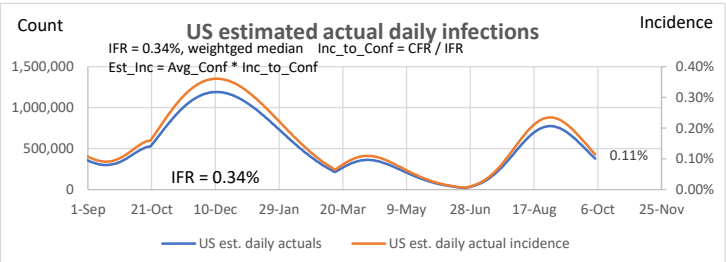
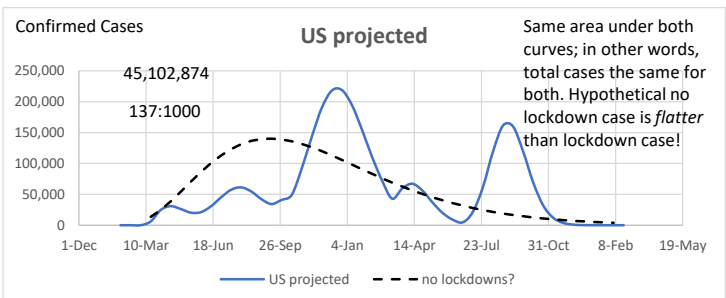
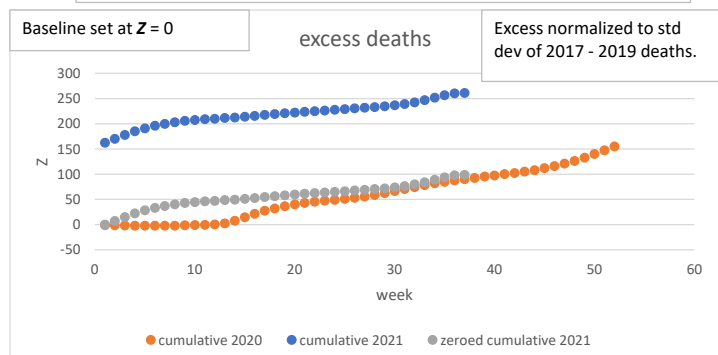


Excess deaths as a Z score:



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 0.11% as estimated daily incidence

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

95% accuracy of test

	Positive	Negative
test pos	1.463%	4.923%
test neg	0.077%	93.537%

0.11% X 14 = 1.540%

1.540%	98.460%	100.00%
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Sensitivity
Probability of detection where condition exists
True + / (True + & False -)
95%

False pos. is more than half of total positives.

TRUE +	1.463%/6.39%	22.9%
FALSE +	4.923%/6.39%	77.1%
Total	6.39%	100.00%

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

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

[Diff.](#)

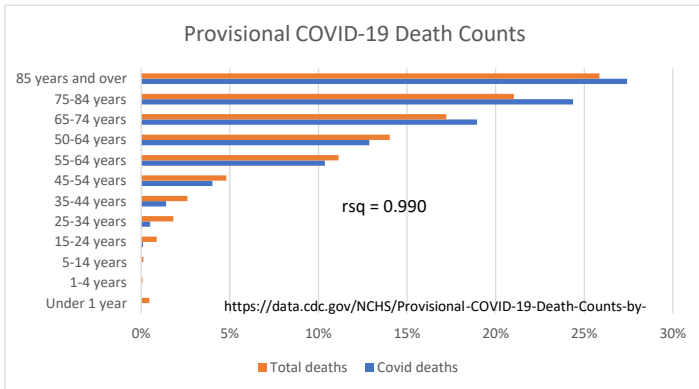
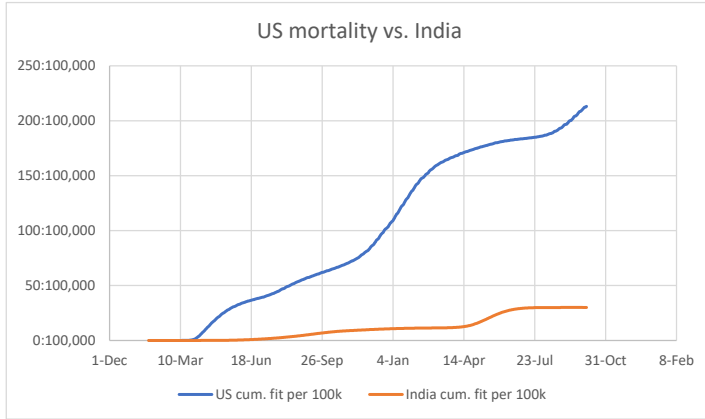
USA Excess Deaths to date (from CDC data):

37 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	606:100,000	606:100,000	-
2021	718:100,000	624:100,000	-
Diff.	112:100,000	17:100,000	95:100,000

3 yr average
859:100,000

15% of All-Cause excess deaths are non-CV19

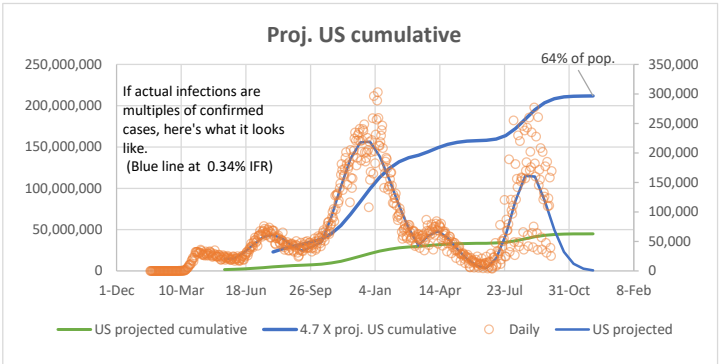
[Diff.](#)



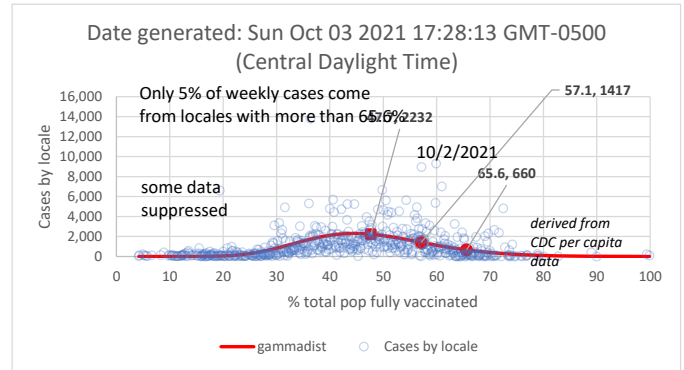
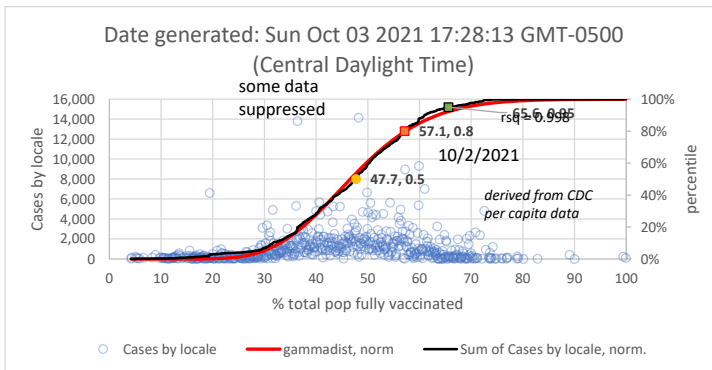
$$K = 0.318 \quad R_o = \exp(K/\gamma) = 6.42 \quad R = 84\% \leq \text{Herd immunity}$$

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

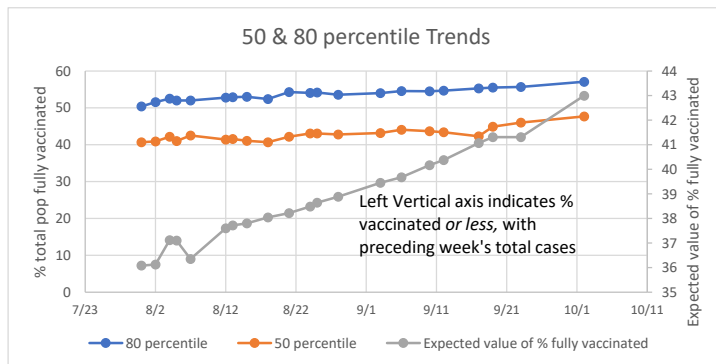
R is recovered variable.



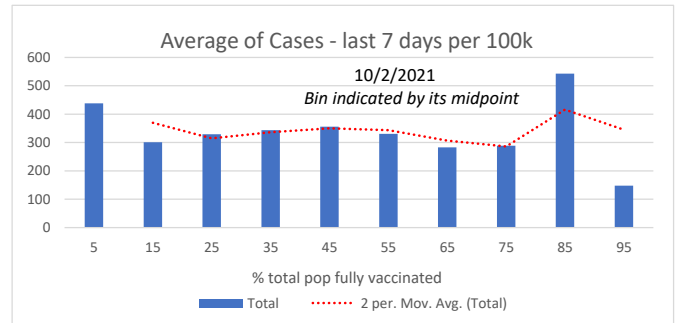
CDC county data on week indicated new cases, by % fully vaccinated.



reporting jurisdictions not uniformly distributed; some data suppressed, for example, Texas



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



Estimates of Cases per 100k



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