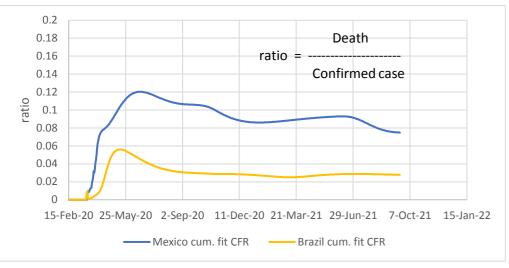
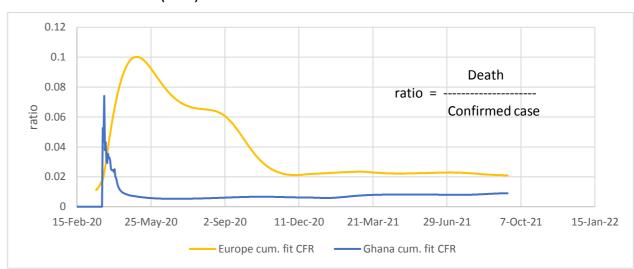
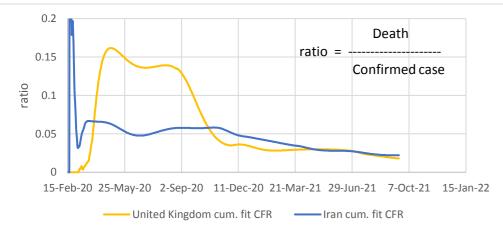
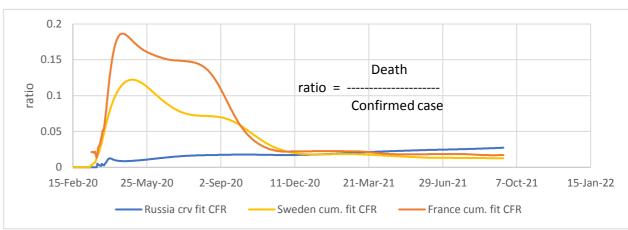
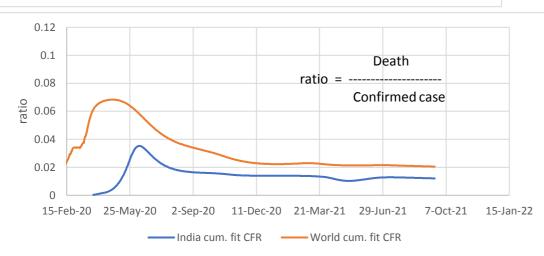
Experimental page: ratios of curve fit deaths to curve fit confirmed cases (CFR)

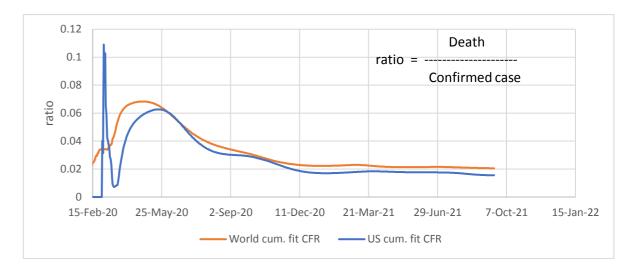










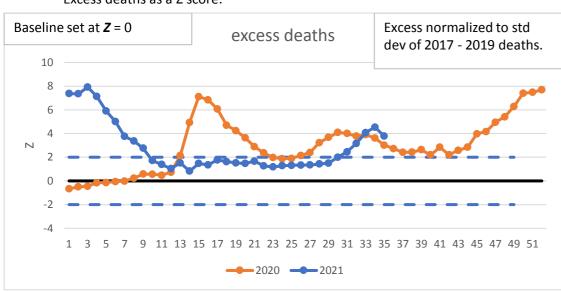


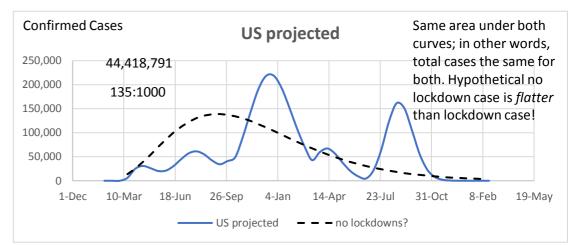
Excess deaths as a Z score:

follows is cumulative plot of same.

cumulative 2020

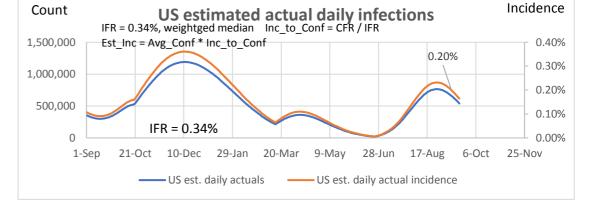
Baseline set at Z = 0





Above based on Z score of two standard deviation from 2017-2019. What

Excess normalized to std



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

excess deaths

dev of 2017 - 2019 deaths. 300 250 200 150 Ν 100 50 0 -50 30 40 50 0 10 60

week

zeroed cumulative 2021

False Positives Demonstration

FALSE +

Total

Use 0.20% as estimated daily incidence

Prevalence estimated as avg. infected period of 2 weeks X incidence 95% accuracy of test

	93/0	accuracy o	accuracy or 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%

 $0.20\% \times 14 = 2.800\%$ Sensitivity Probability of detection where condition exists

True + / (True + & False -) 95%

35.4%

<u>64.6%</u>

100.00%

False pos. is more than half of total positives. TRUE + 2.66%/7.52% 4.86%/7.52%

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

95%

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

cumulative 2021

US mortality vs. India 250:100,000 200:100,000 150:100,000 100:100,000 50:100,000 0:100,000 10-Mar 1-Dec 18-Jun 26-Sep 4-Jan 14-Apr 23-Jul 31-Oct US cum. fit per 100k ——India cum. fit per 100k

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
Diff	

29% of All-Cause excess deaths are non-CV19

USA Excess Deaths to date (from CDC data):

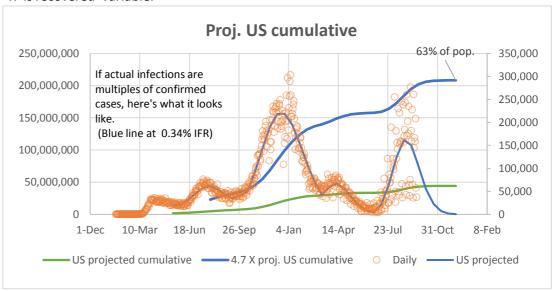
	36 weeks	All Cause	All Cause, excl. CV19	CV19
3	yr average before 2020	590:100,000	590:100,000	-
	2021	696:100,000	606:100,000	-
	Diff.	106:100,000	16:100,000	90:100,000

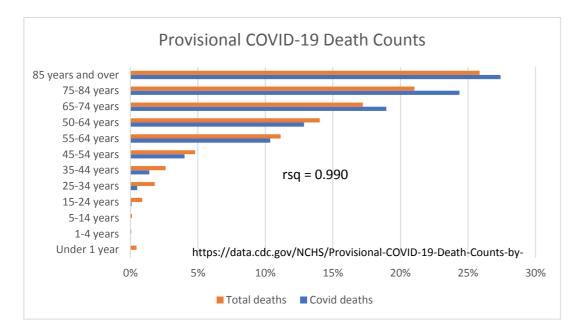
	3 yr average
	859:100,000
Diff.	

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

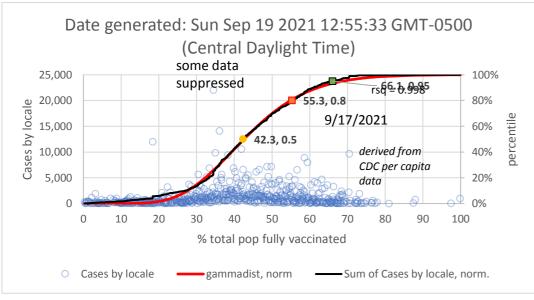
K = 0.318R : R_o : gamma = 0.171 $R_o = \exp(K/\text{gamma})$ = 6.42 84% <=Herd immunity gamma = 0.286 $R > 1-1/R_{o}$ 67% = 3.04

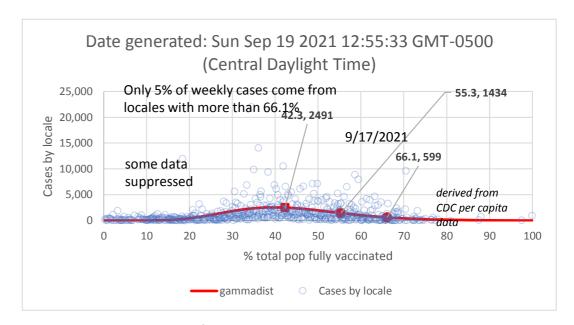
R is recovered variable.



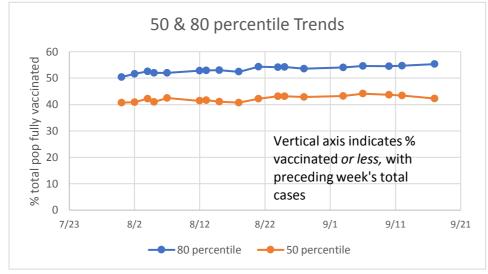


CDC county data on week indicated new cases, by % fully vaccinated.

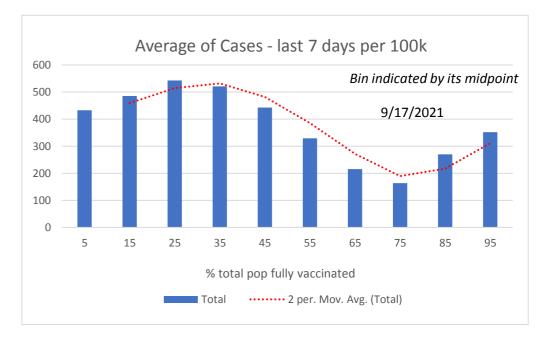


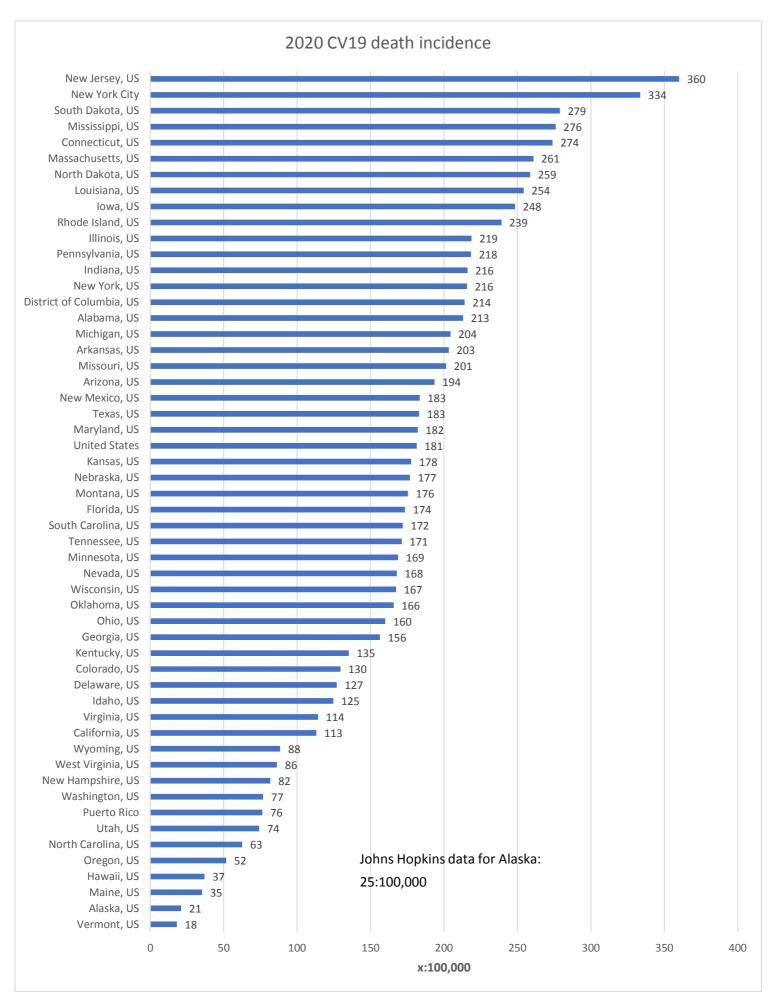


reporting jurisdictions is not a uniform distribution; some data suppressed, for example Texas



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





 $\underline{https://data.cdc.gov/NCHS/Weekly-Counts-of-Deaths-by-State-and-Select-Causes/muzy-jte6/data}$