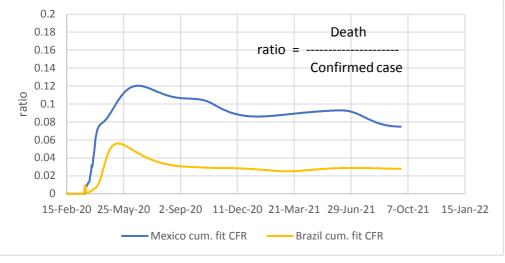
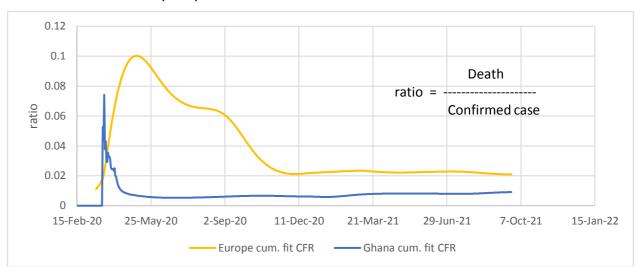
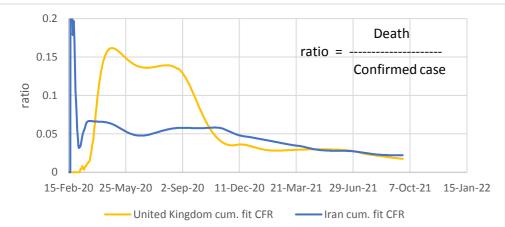
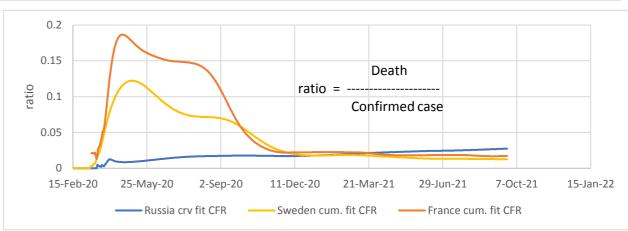
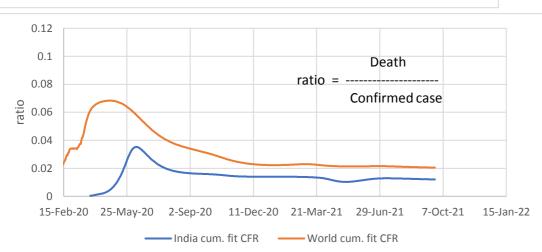
Experimental page: ratios of curve fit deaths to curve fit confirmed cases (CFR)

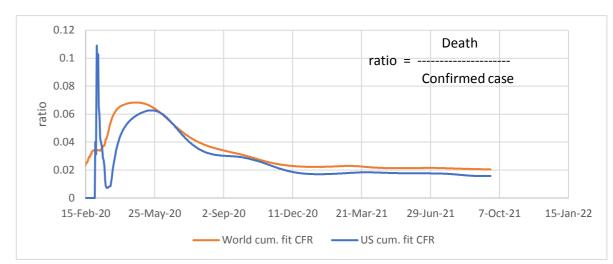






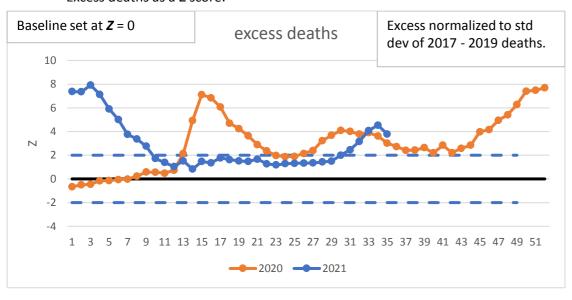


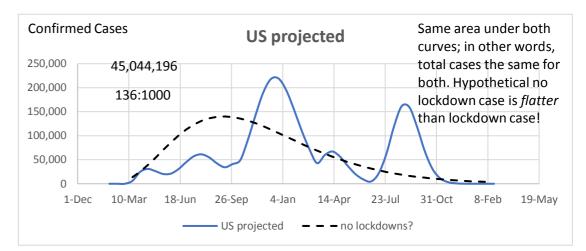




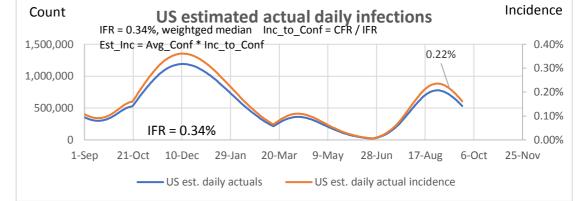
Excess deaths as a Z score:

Baseline set at Z = 0





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

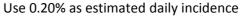
excess deaths

Excess normalized to std

zeroed cumulative 2021

dev of 2017 - 2019 deaths.

False Positives Demonstration



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

300 250 200 150 Ν 100 50 0 -50 30 40 50 0 10 60 week

	Positive	Negative	
test pos	2.660%	4.860%	7.52%
test neg	0.140%	92.340%	92.48%
	2.800%	97.200%	100.00%

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

0.20% X 14 = 2.800%

False pos. is more than half of total positives.

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

95% accuracy of test

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

cumulative 2021

cumulative 2020

US mortality vs. India 250:100,000 200:100,000 150:100,000 100:100,000 50:100,000 0:100,000 1-Dec 10-Mar 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

 R_o :

= 6.42

= 3.04

K = 0.318

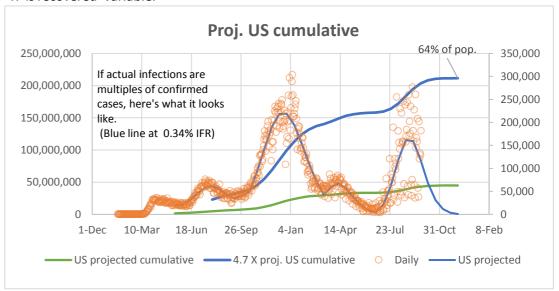
gamma = 0.171 $R_o = \exp(K/\text{gamma})$

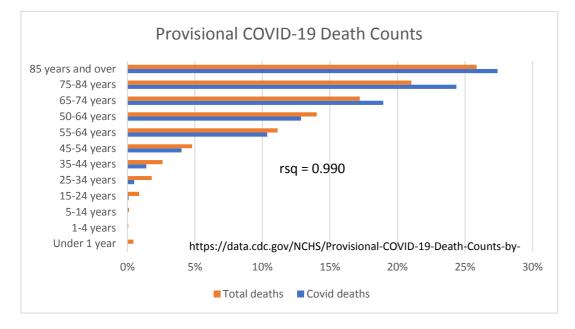
 $R > 1 - 1/R_{0}$

R : 84% 67%

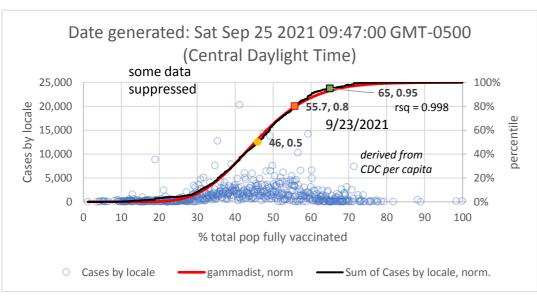
<=Herd immunity

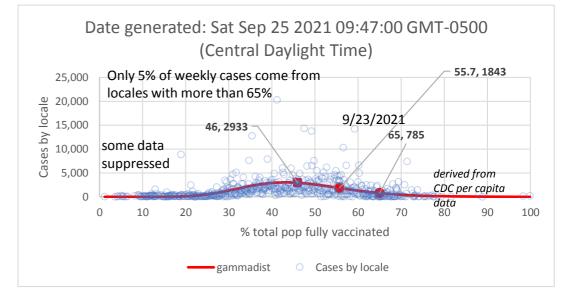
gamma = 0.286 R is recovered variable.



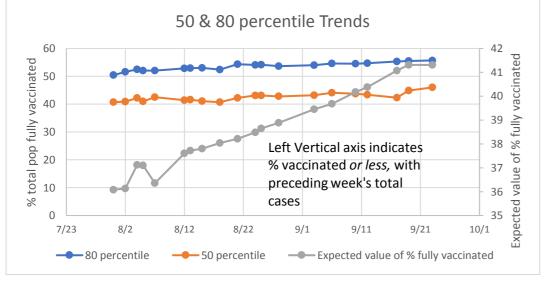


CDC county data on week indicated new cases, by % fully vaccinated.

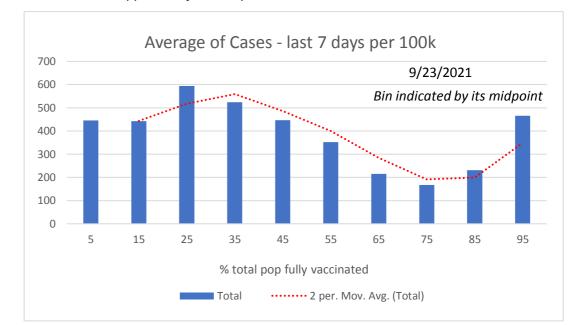


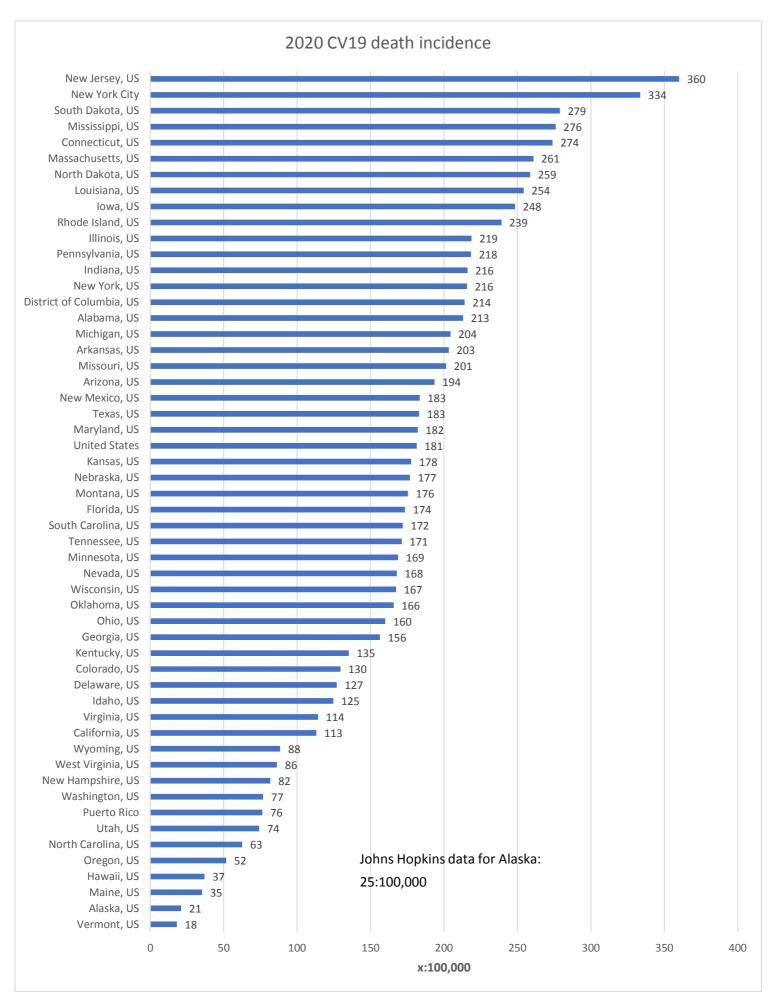


reporting jurisdictions not uniformly distributed; some data suppressed, for example, Texas



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





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