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

$$\text{Death ratio} = \frac{\text{Death}}{\text{Confirmed case}}$$

Mexico cum. fit CFR — Brazil cum. fit CFR

Europe cum. fit CFR — Ghana cum. fit CFR

United Kingdom cum. fit CFR — Iran cum. fit CFR

Russia crv fit CFR — Sweden cum. fit CFR — France cum. fit CFR

India cum. fit CFR — World cum. fit CFR
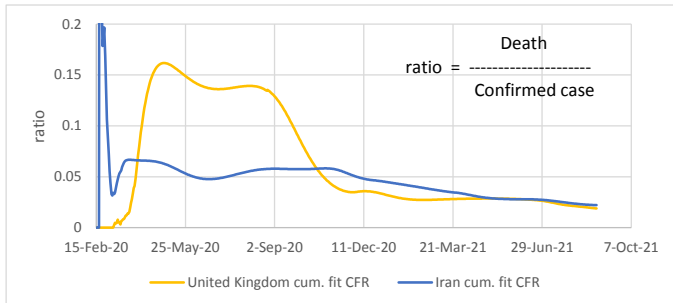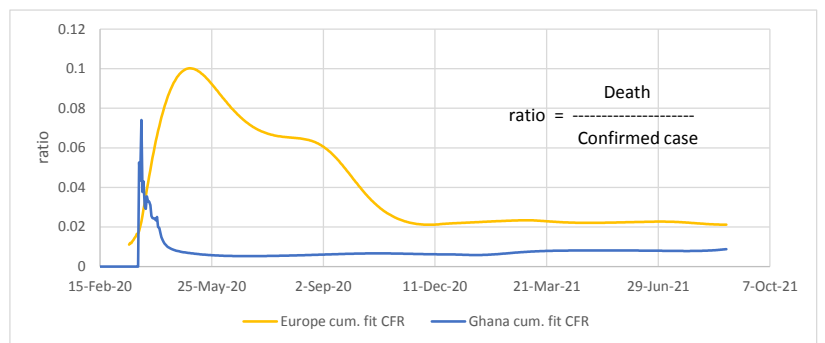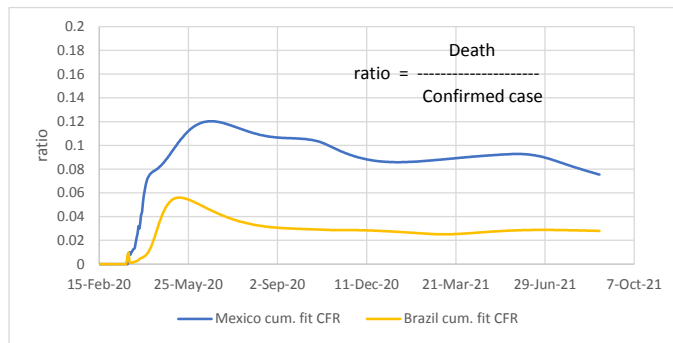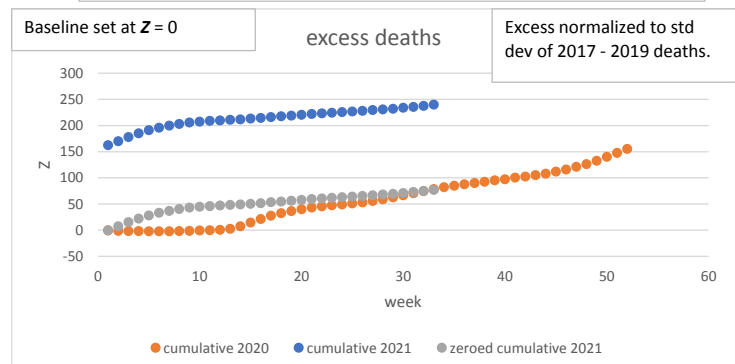

World cum. fit CFR — US cum. fit CFR
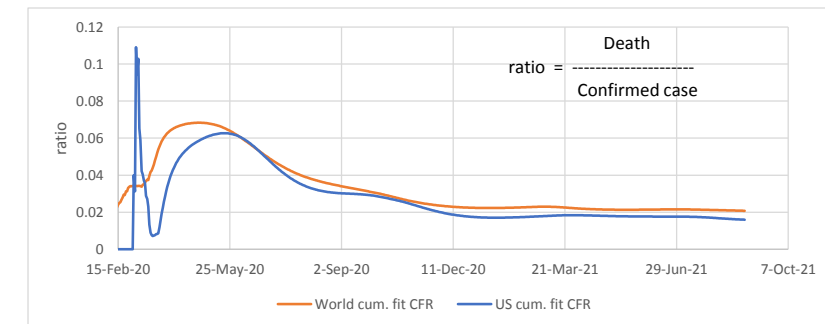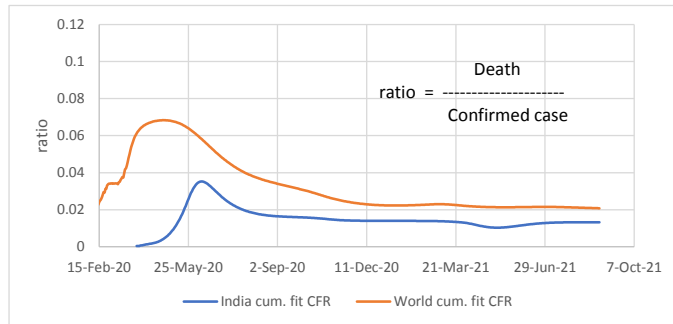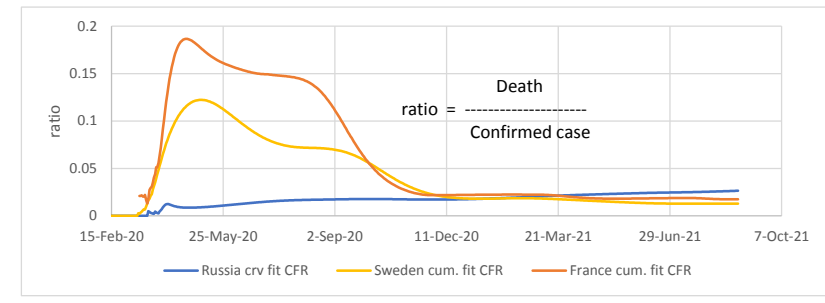
Excess deaths as a Z score:

Baseline set at **Z** = 0

Excess normalized to std dev of 2017 - 2019 deaths.
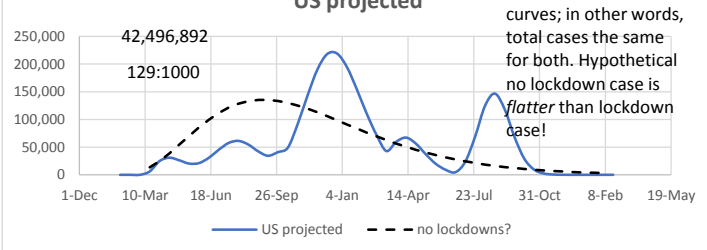

excess deaths

2020 — 2021
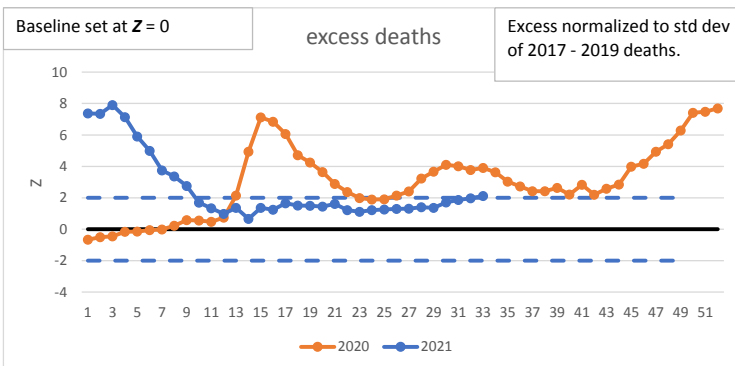
Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.
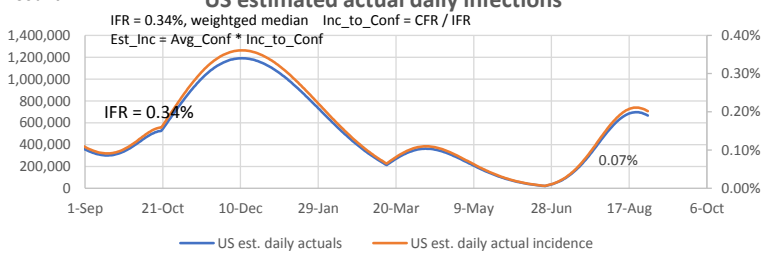
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely

Baseline set at **Z** = 0

Excess normalized to std dev of 2017 - 2019 deaths.

excess deaths

cumulative 2020 — cumulative 2021 — zeroed cumulative 2021

Confirmed Cases

US projected

42,496,892

129:1000

Same area under both curves; in other words, total cases the same for both. Hypothetical no lockdown case is *flatter* than lockdown case!

US projected — — — no lockdowns?

US estimated actual daily infections

Count

Incidence

IFR = 0.34%, weightged median   Inc_to_Conf = CFR / IFR
Est_Inc = Avg_Conf * Inc_to_Conf

IFR = 0.34%

0.07%

US est. daily actuals — US est. daily actual incidence

False Positives Demonstration

Use 0.07% as estimated daily incidence

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

99% accuracy of test   0.07% X 14 = 0.980%

	Positive	Negative	
test pos	0.970%	0.990%	1.96%
test neg	0.010%	98.030%	98.04%
	0.980%	99.020%	100.00%

False pos. is more than half of total positives.

TRUE +	0.97%/1.96%	49.5%
FALSE +	0.99%/1.96%	50.5%
Total	-------------------	100.00%

Counter-act this tendency by increasing test sensitivity. However this may increase false negatives, the recipients of which may be positive, think they're negative, and go spread it around some more.
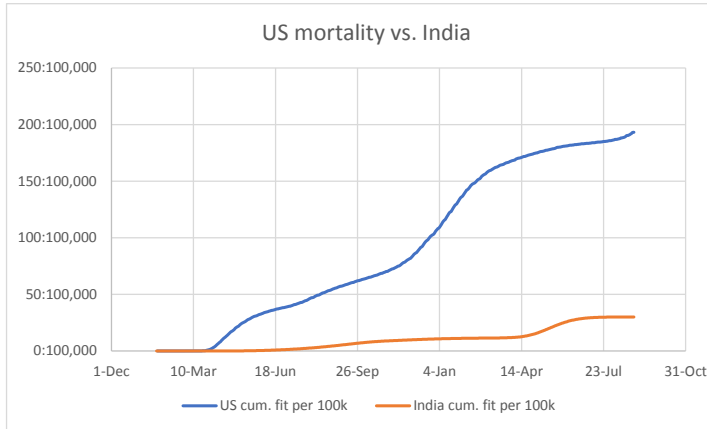
USA Excess Deaths, 2020 (from CDC data):

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):

33 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	539:100,000	539:100,000	-
2021	633:100,000	554:100,000	-
Diff.	94:100,000	15:100,000	79:100,000

3 yr average
859:100,000

16% of All-Cause excess deaths are non-CV19

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

US mortality vs. India
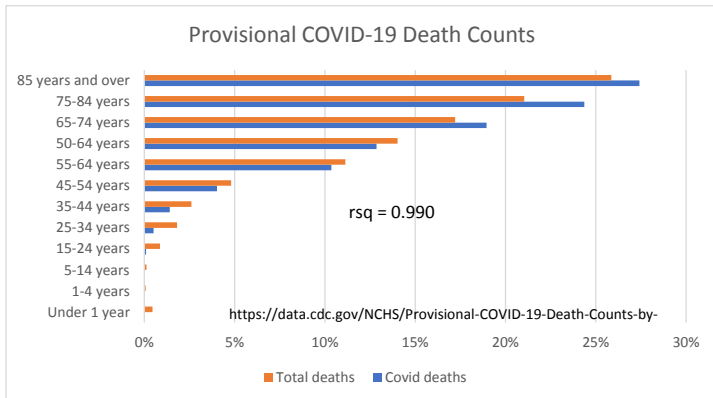
$K = 0.318$ R_o : R :

$\gamma = 0.171$ $R_o = \exp(K/\gamma)$ = 6.42   84%   <=Herd immunity

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

R is *recovered* variable.

Provisional COVID-19 Death Counts

rsq = 0.990

https://data.cdc.gov/NCHS/Provisional-COVID-19-Death-Counts-by-

Proj. US cumulative

If actual infections are multiples of confirmed cases, here's what it looks like.
(Blue line at 0.34% IFR)

62% of pop.
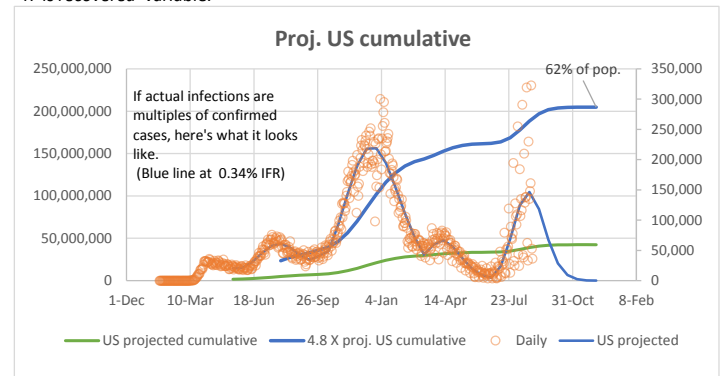
CDC county data on week indicated new cases, by % fully vaccinated.

Date generated: Mon Aug 30 2021 11:02:38 GMT-0500 (Central Daylight Time)

some data suppressed

rsq = 0.996

64.5, 95%

53.6, 80%

8/28/2021

42.8, 50%

derived from CDC per capita data
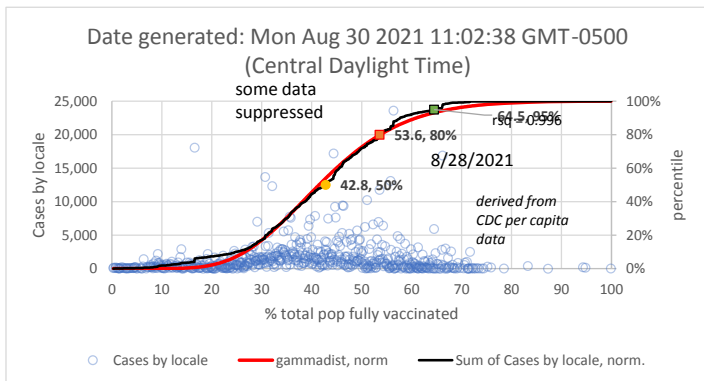
Estimates of Cases per 100k

Date generated: Mon Aug 30 2021 11:02:38 GMT-0500 (Central Daylight Time)

Only 5% of weekly cases come from locales with more than 64.5%

53.6, 1681

42.8, 2743

8/28/2021

64.5, 705

some data suppressed

derived from CDC per capita data
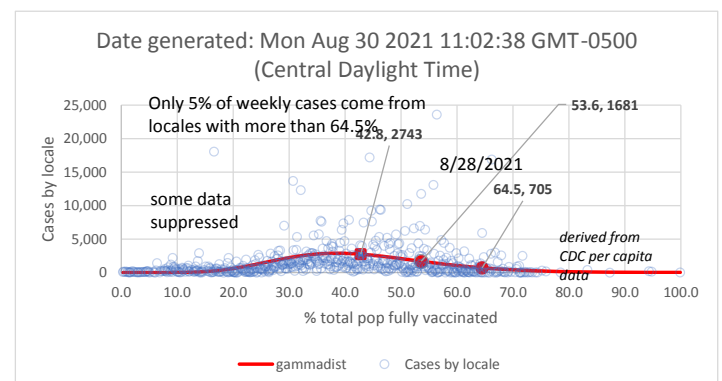
reporting jurisdictions is not a uniform distribution; some data suppressed, for example Texas

50 & 80 percentile Trends

Vertical axis indicates % vaccinated *or less,* with preceding week's total cases

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

2020 CV19 death incidence

State	x:100,000
New Jersey, US	360
New York City	334
South Dakota, US	279
Mississippi, US	276
Connecticut, US	274
Massachusetts, US	261
North Dakota, US	259
Louisiana, US	254
Iowa, US	248
Rhode Island, US	239
Illinois, US	219
Pennsylvania, US	218
Indiana, US	216
New York, US	216
District of Columbia, US	214
Alabama, US	213
Michigan, US	204
Arkansas, US	203
Missouri, US	201
Arizona, US	194
New Mexico, US	183
Texas, US	183
Maryland, US	182
United States	181
Kansas, US	178
Nebraska, US	177
Montana, US	176
Florida, US	174
South Carolina, US	172
Tennessee, US	171
Minnesota, US	169
Nevada, US	168
Wisconsin, US	167
Oklahoma, US	166
Ohio, US	160
Georgia, US	156
Kentucky, US	135
Colorado, US	130
Delaware, US	127
Idaho, US	125
Virginia, US	114
California, US	113
Wyoming, US	88
West Virginia, US	86
New Hampshire, US	82
Washington, US	77
Puerto Rico	76
Utah, US	74
North Carolina, US	63
Oregon, US	52
Hawaii, US	37
Maine, US	35
Alaska, US	21
Vermont, US	18

Johns Hopkins data for Alaska:
25:100,000

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