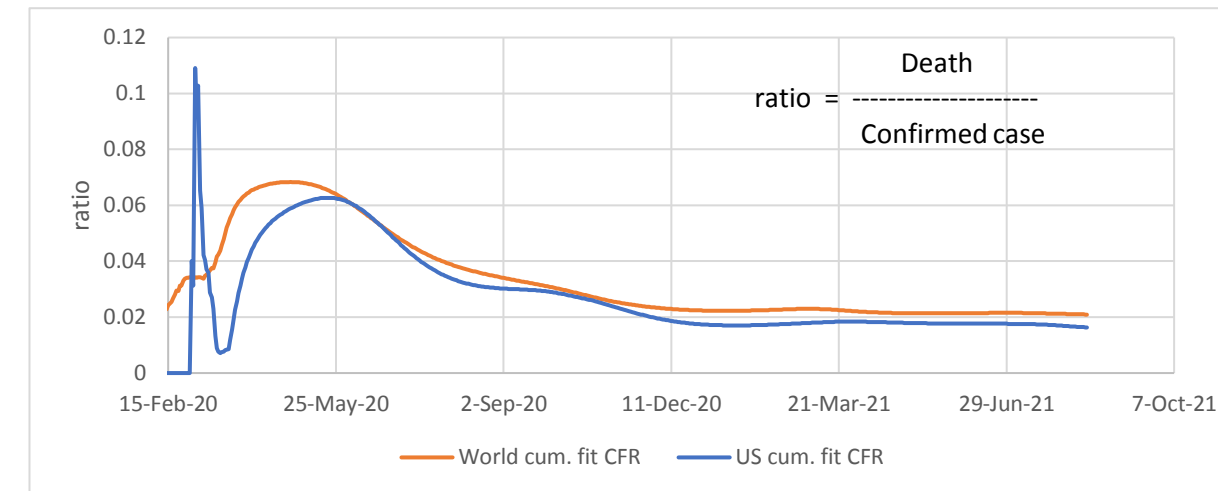
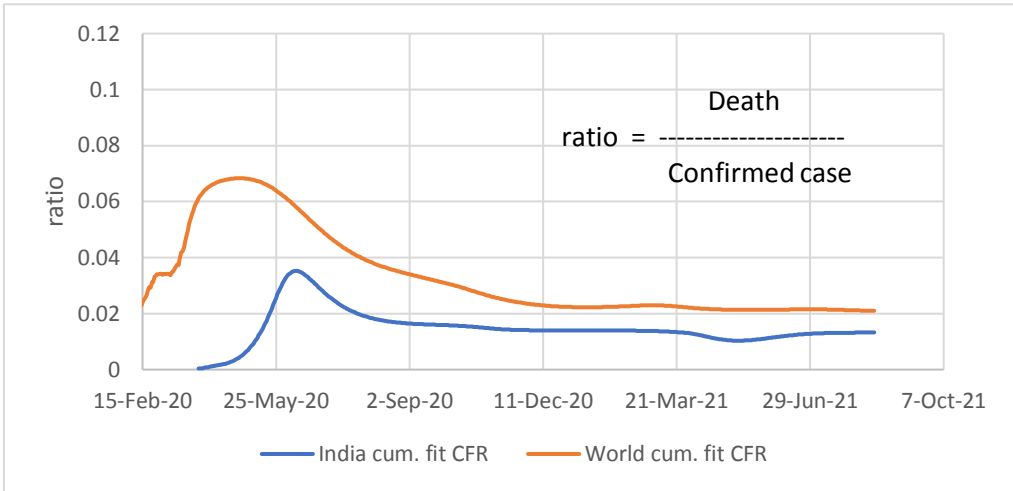
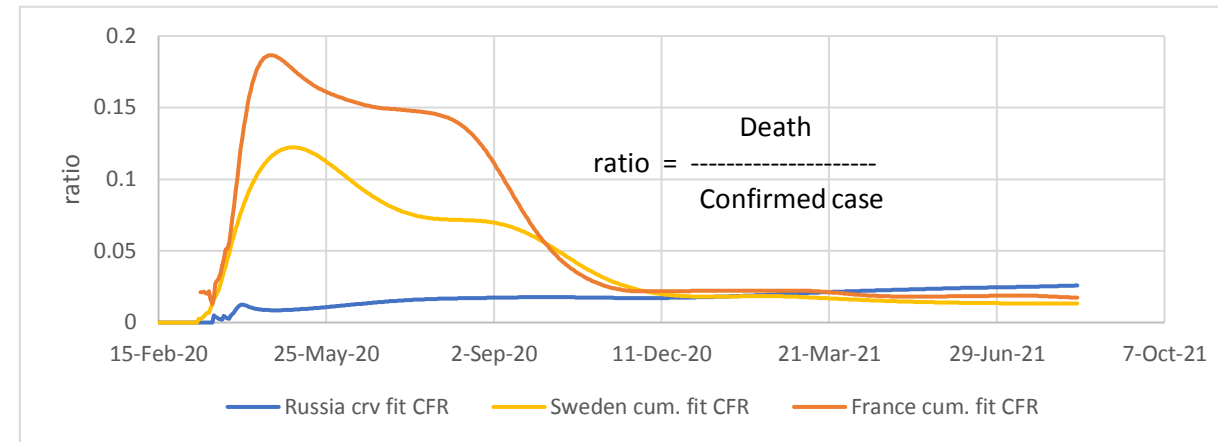
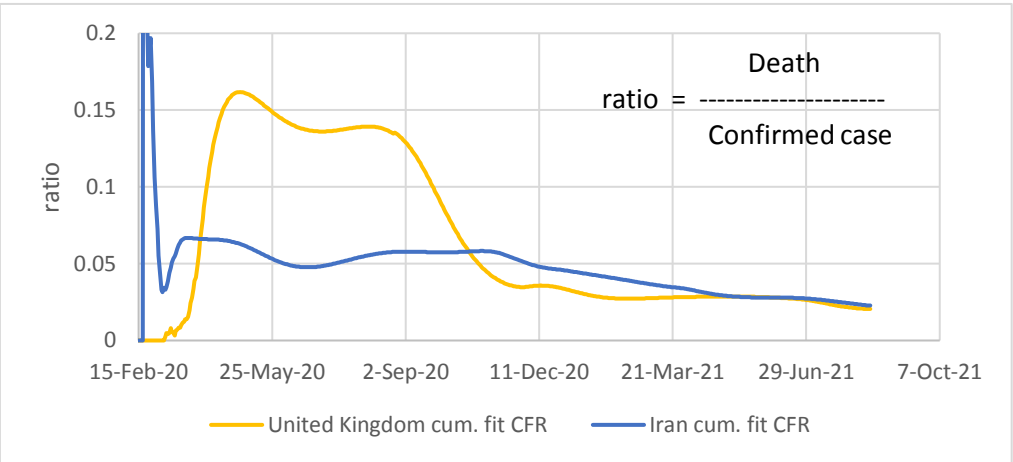
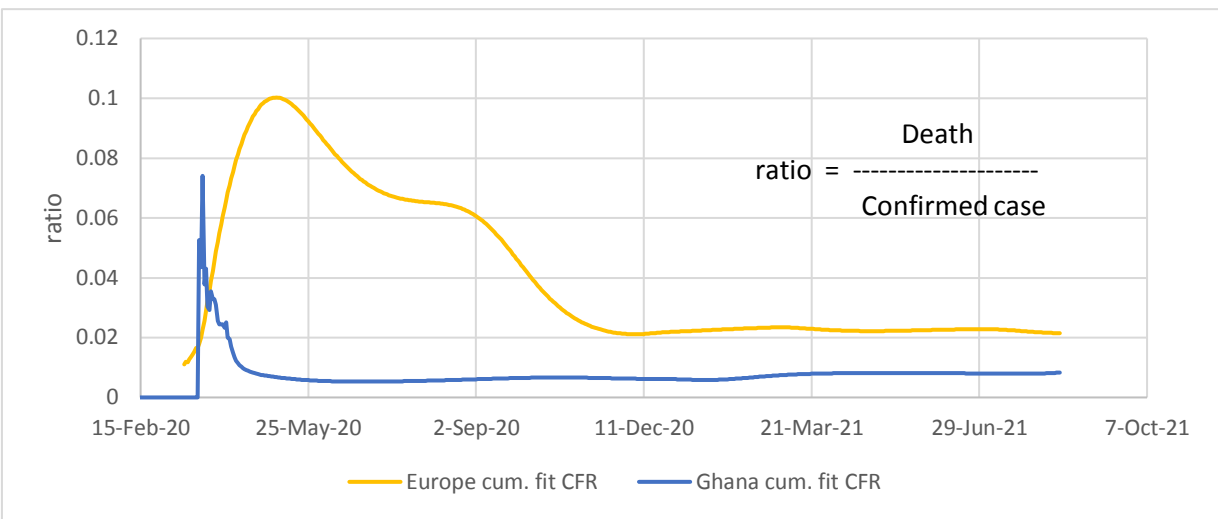
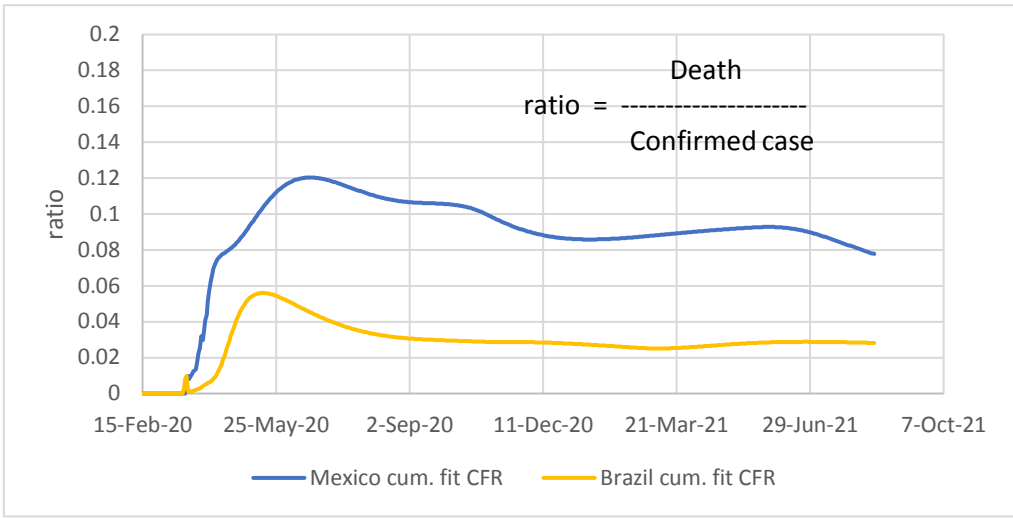
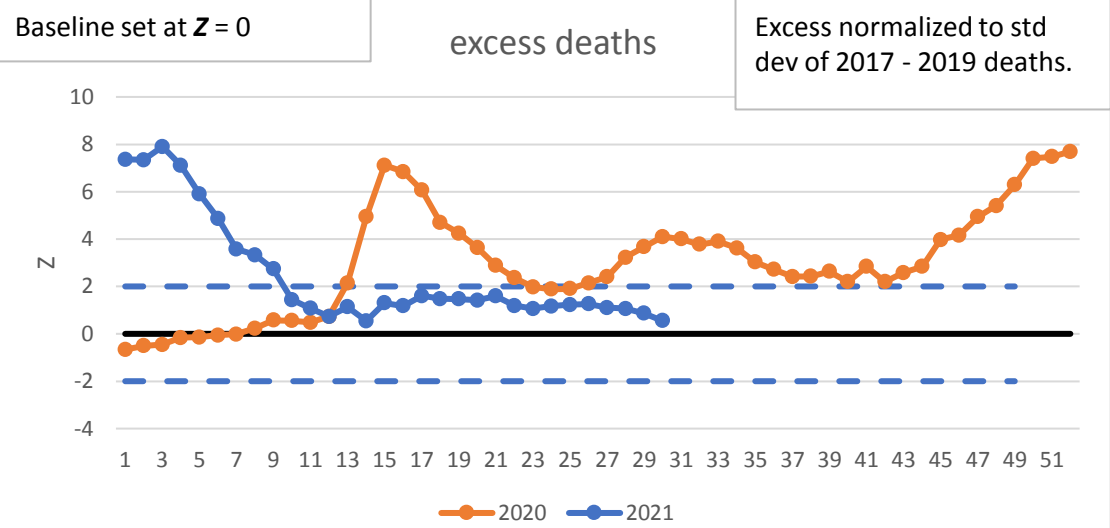


Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

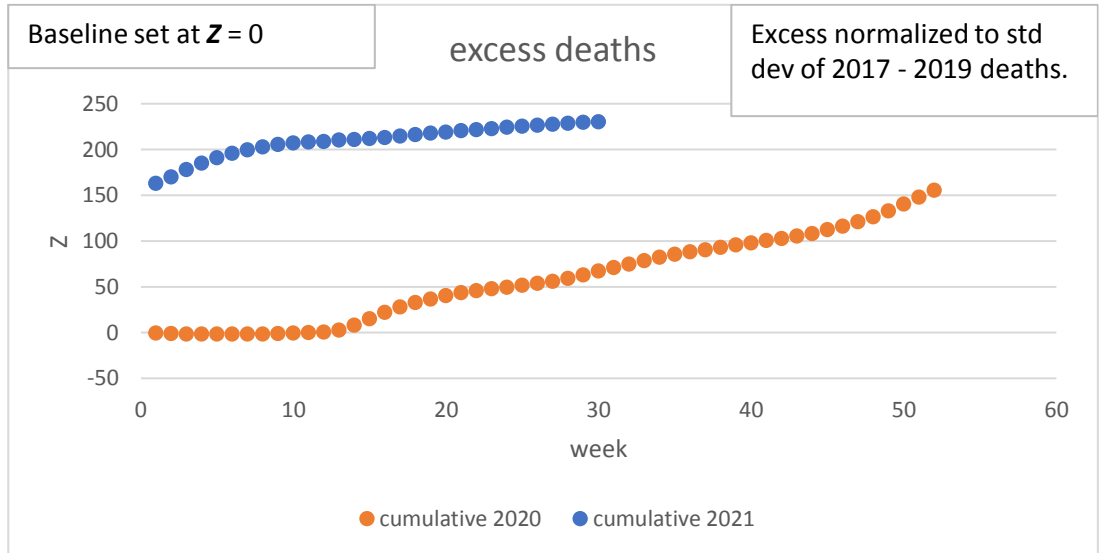


Excess deaths as a Z score:

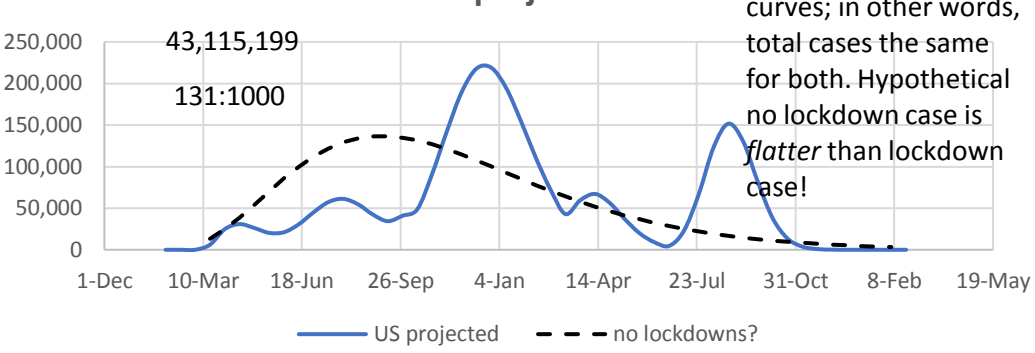


Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.

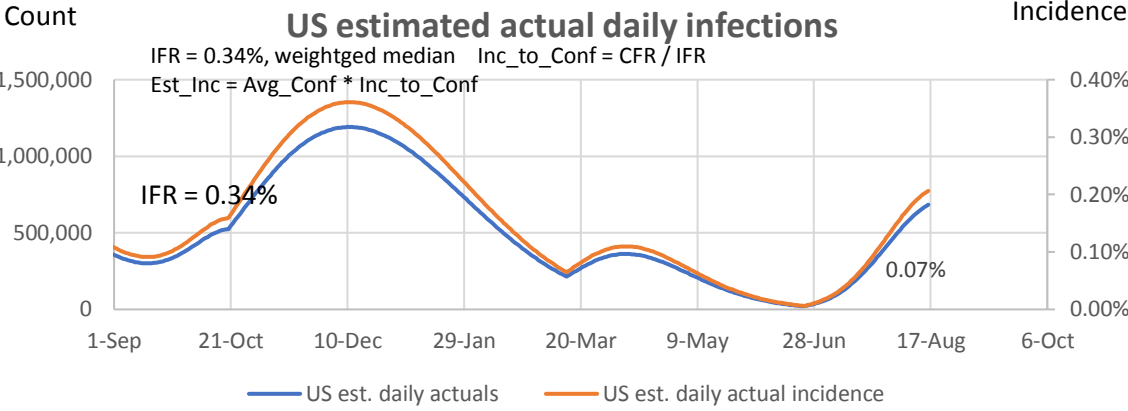
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely



Confirmed Cases



Count



False Positives Demonstration

Use 0.07% as estimated daily incidence

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

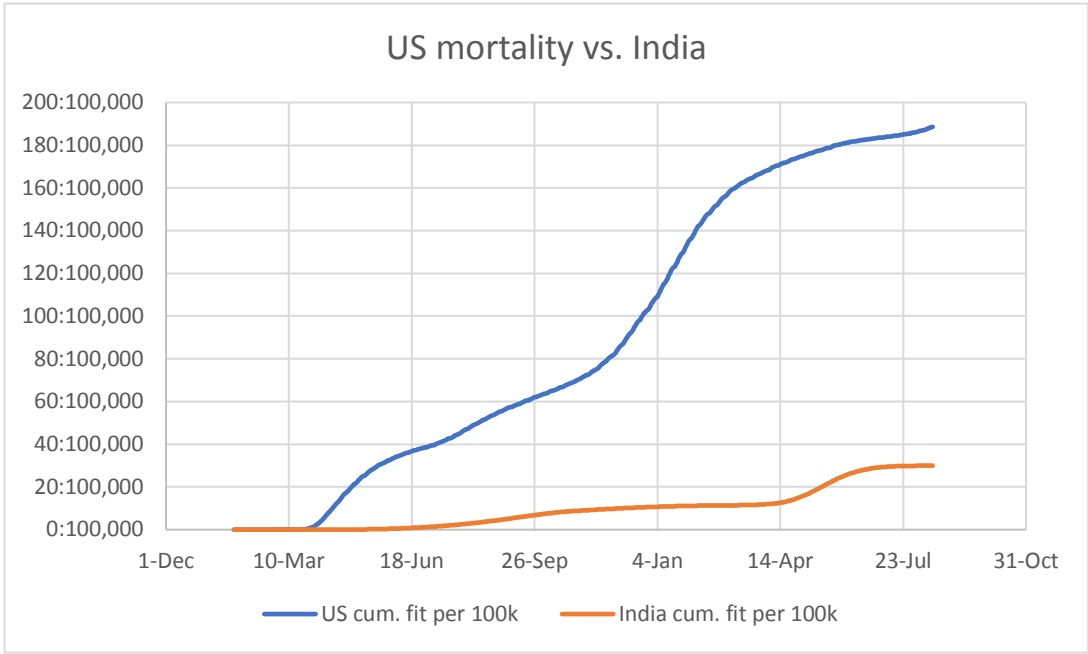
99% accuracy of test 0.07% X 14 = 0.980%

|          | 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/xkxf-xrst/data>

USA Excess Deaths to date (from CDC data):

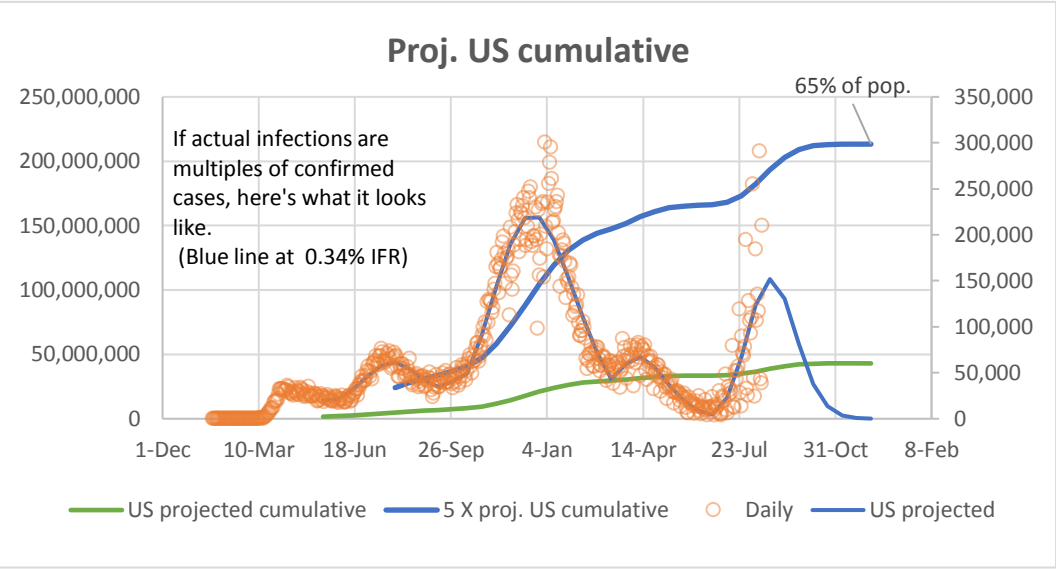
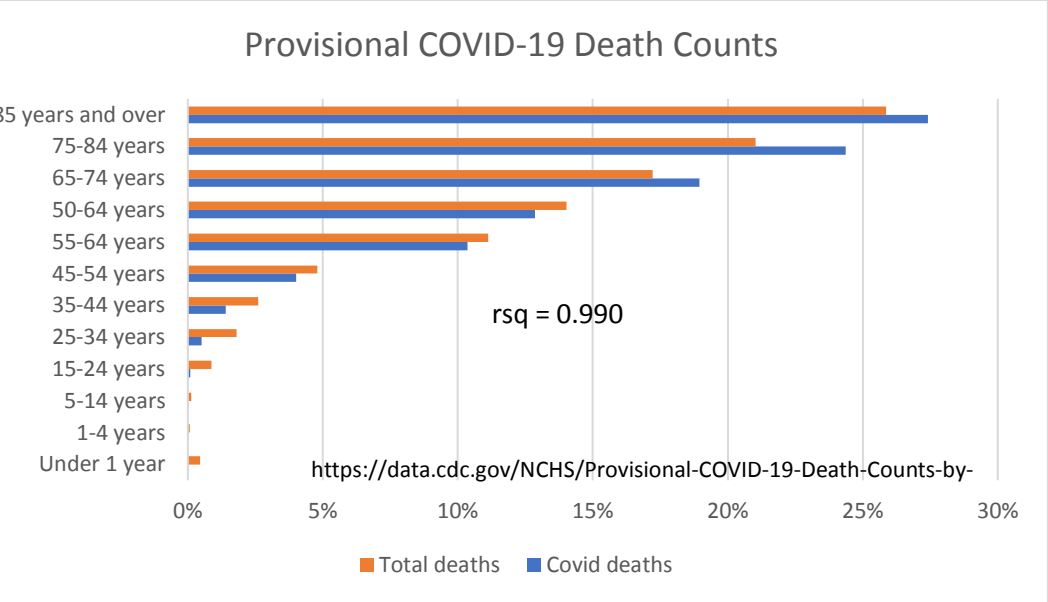
| 31 weeks                 | All Cause   | All Cause, excl. CV19 | CV19       |
|--------------------------|-------------|-----------------------|------------|
| 3 yr average before 2020 | 505:100,000 | 505:100,000           | -          |
| 2021                     | 578:100,000 | 518:100,000           | -          |
| Diff.                    | 73:100,000  | 13:100,000            | 60:100,000 |

| 3 yr average |
|--------------|
| 859:100,000  |

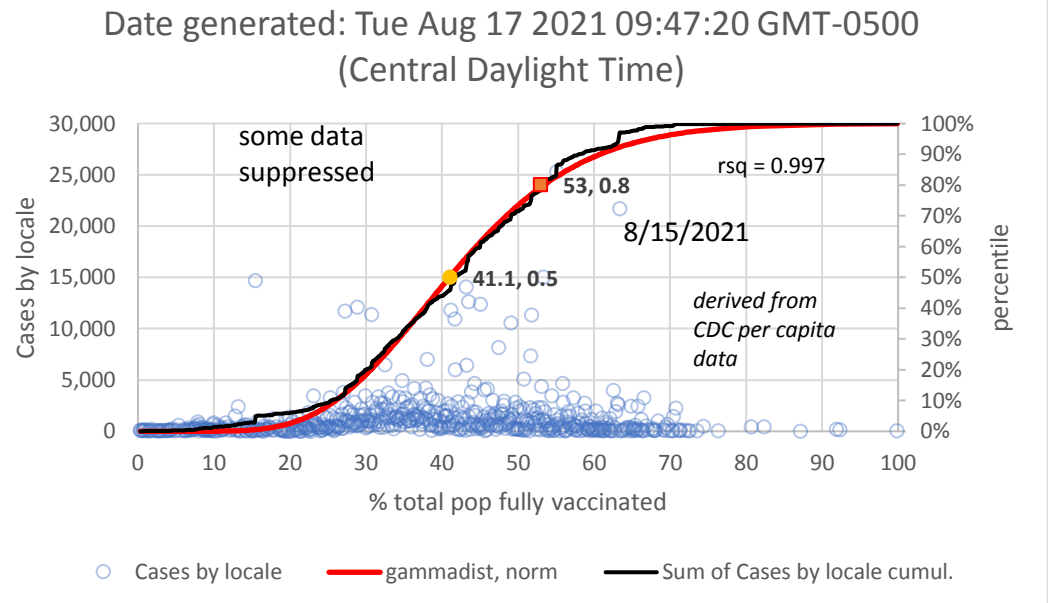
17% of All-Cause excess deaths are non-CV19

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

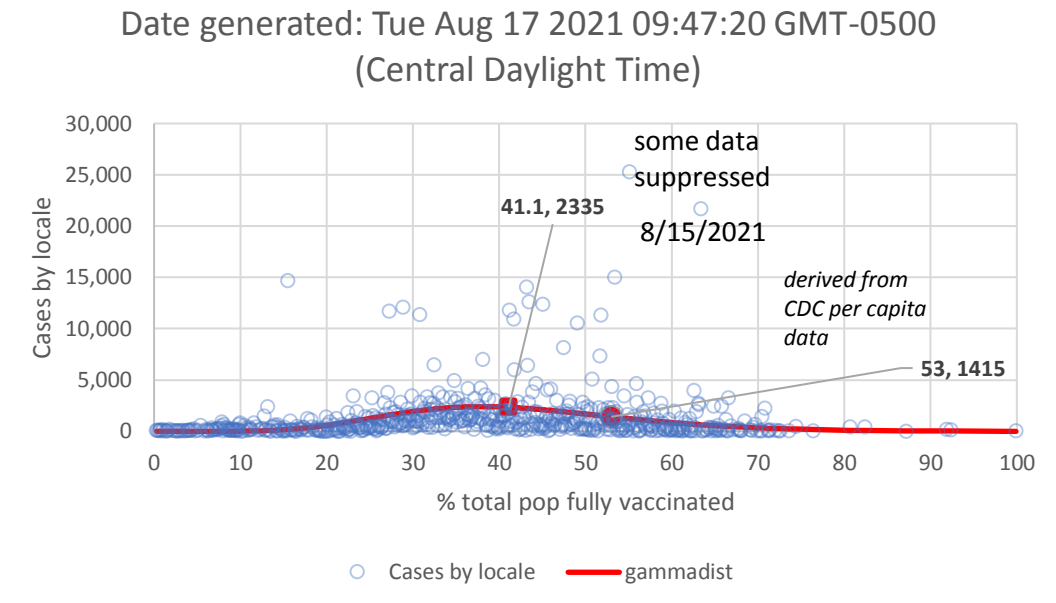
$K = 0.318$      $R_o :$      $R :$   
 $\gamma = 0.171$      $R_o = \exp(K/\gamma) = 6.42$     84%  
 $\gamma = 0.286$      $R > 1 - 1/R_o = 3.04$     67%     $\leq$  Herd immunity  
 $R$  is recovered variable.



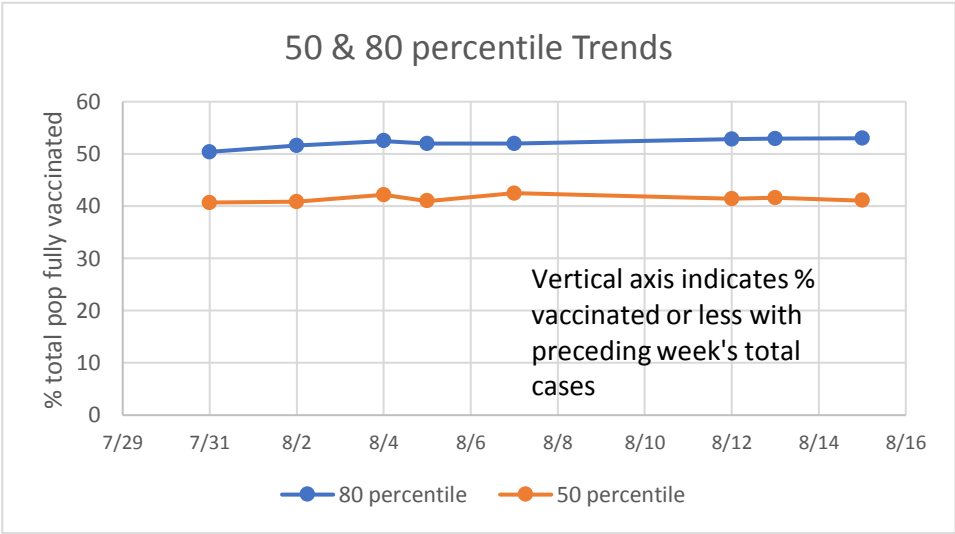
CDC data on week indicated new cases by % fully vaccinated.



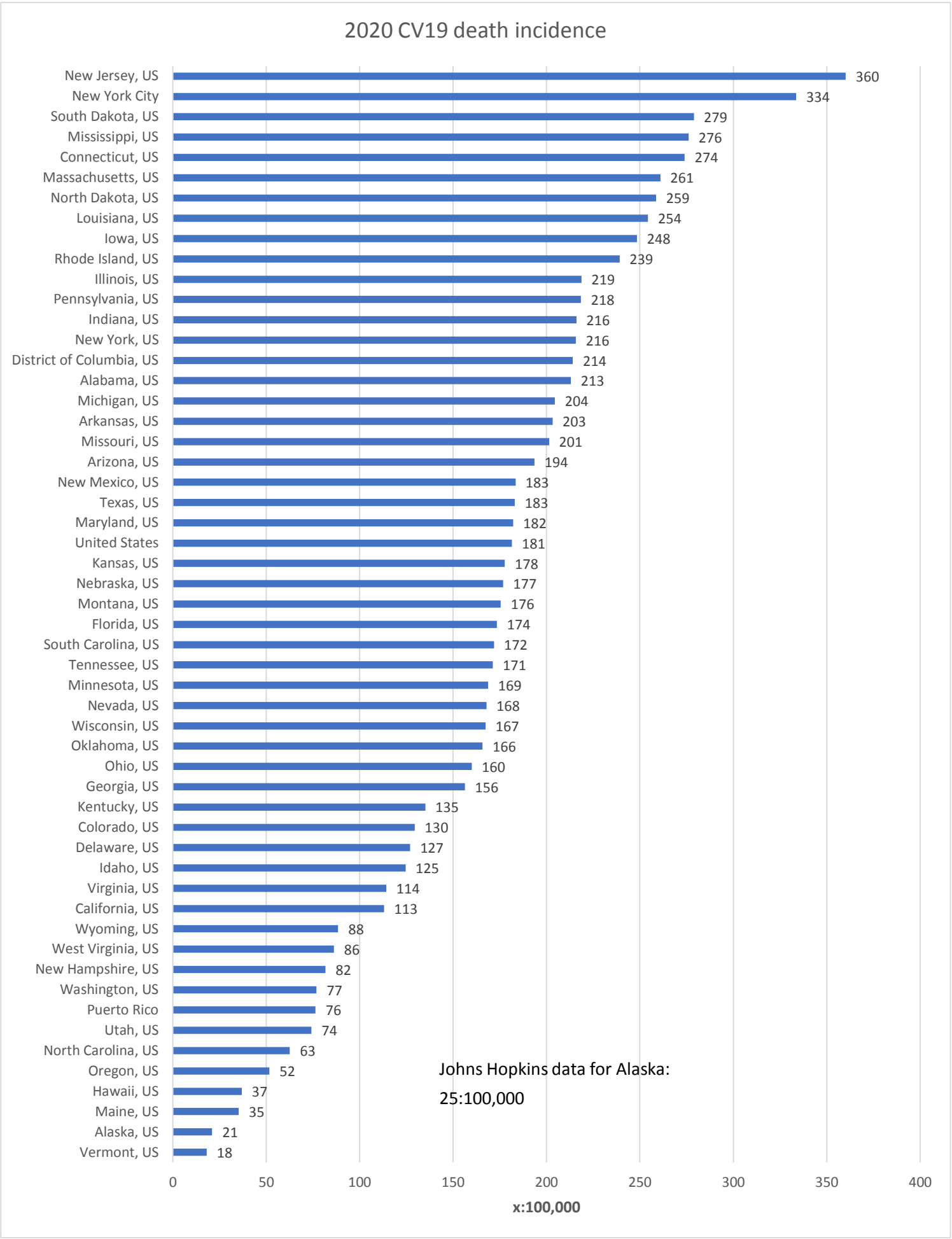
Estimates of Cases per 100k



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>