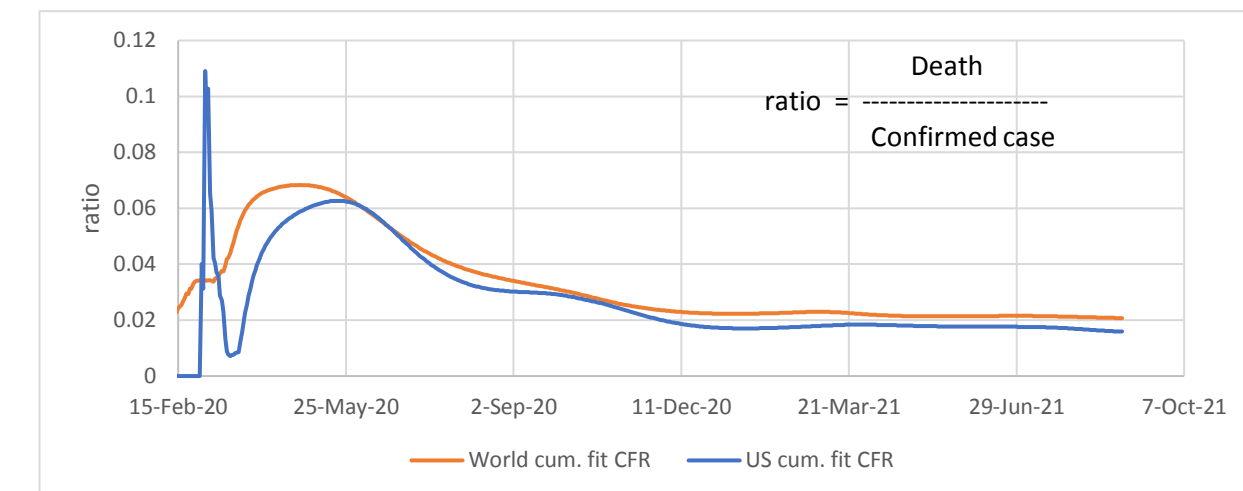
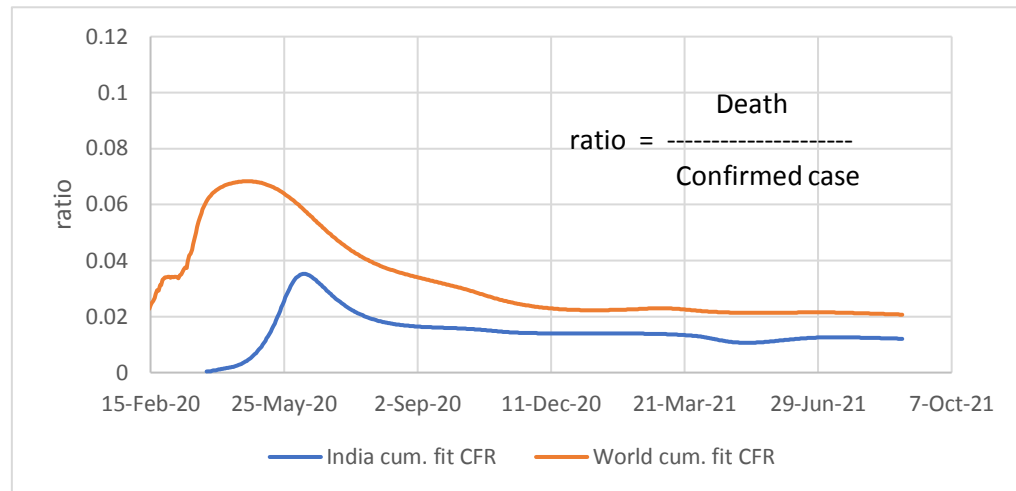
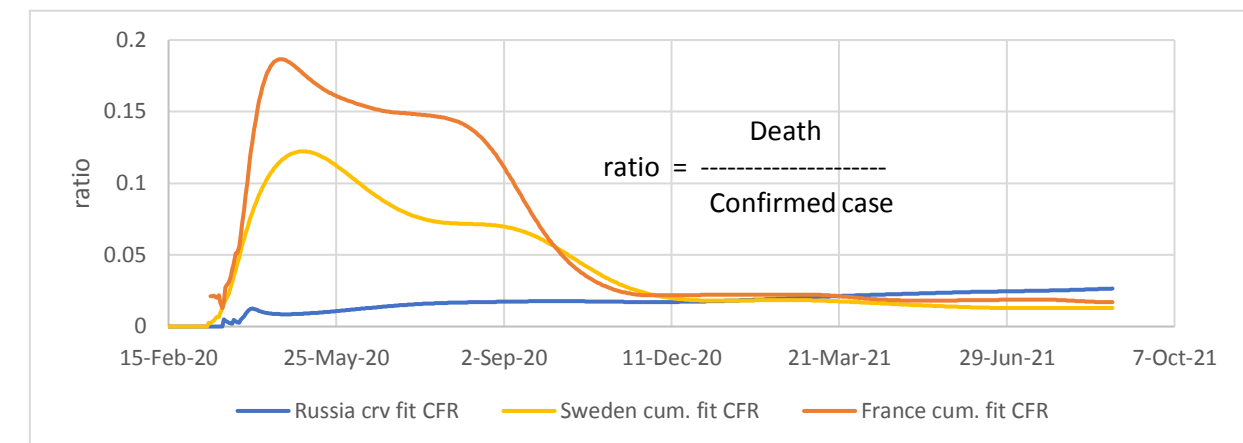
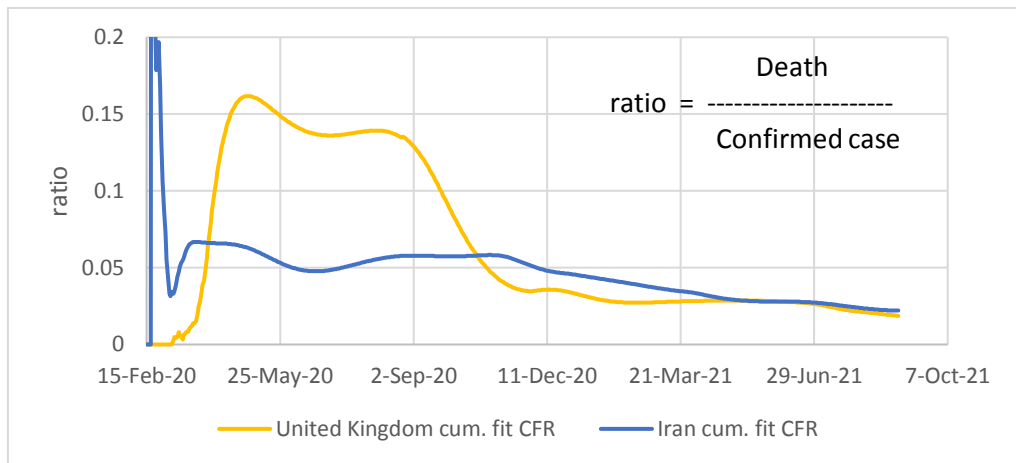
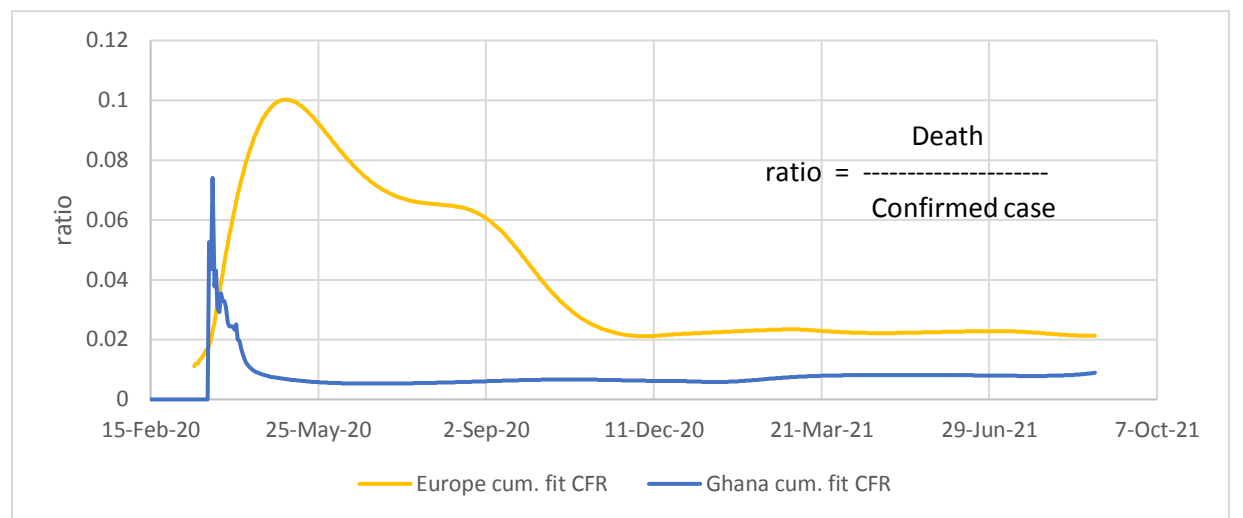
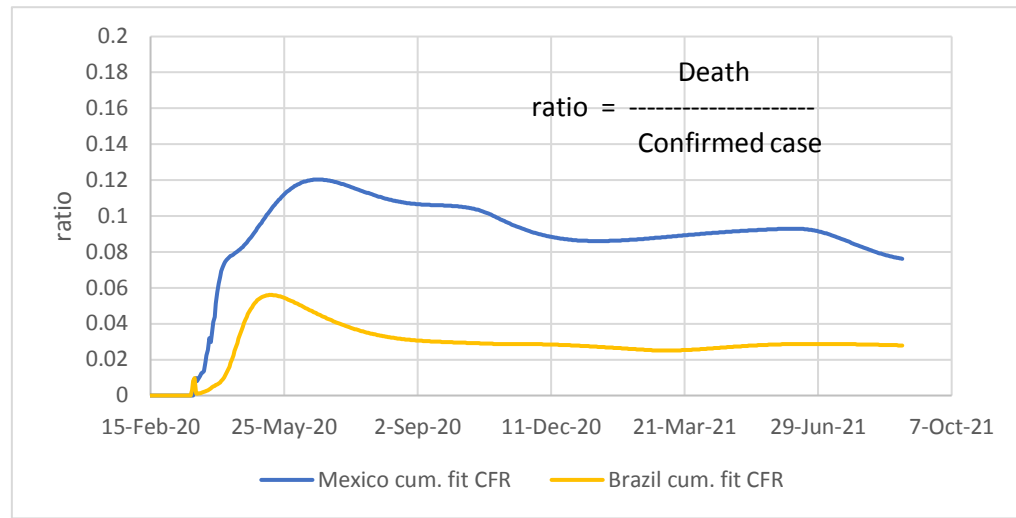
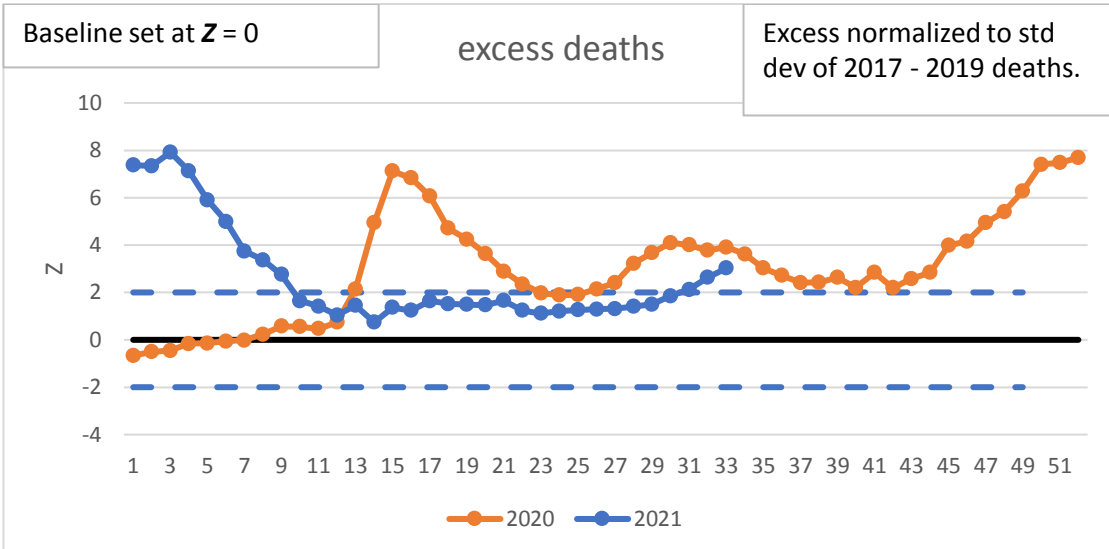


## Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

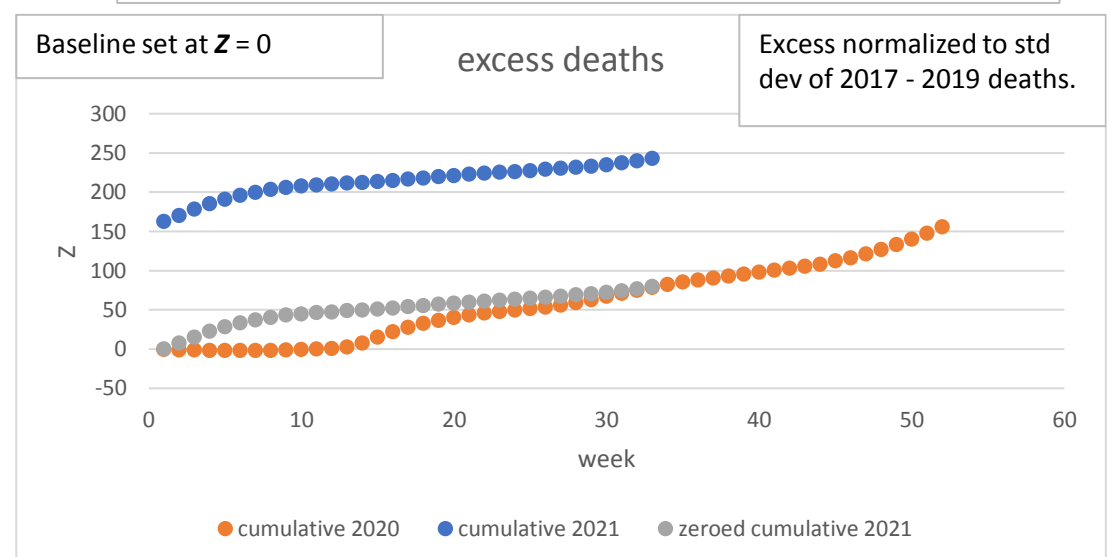


### Excess deaths as a Z score:

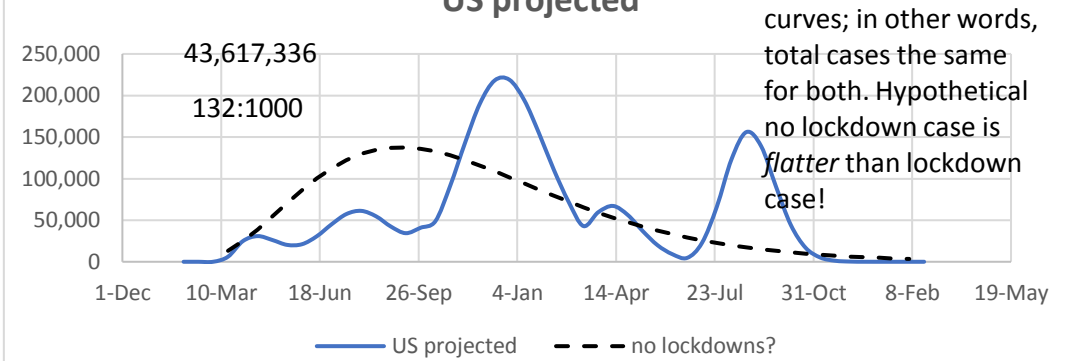


Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.

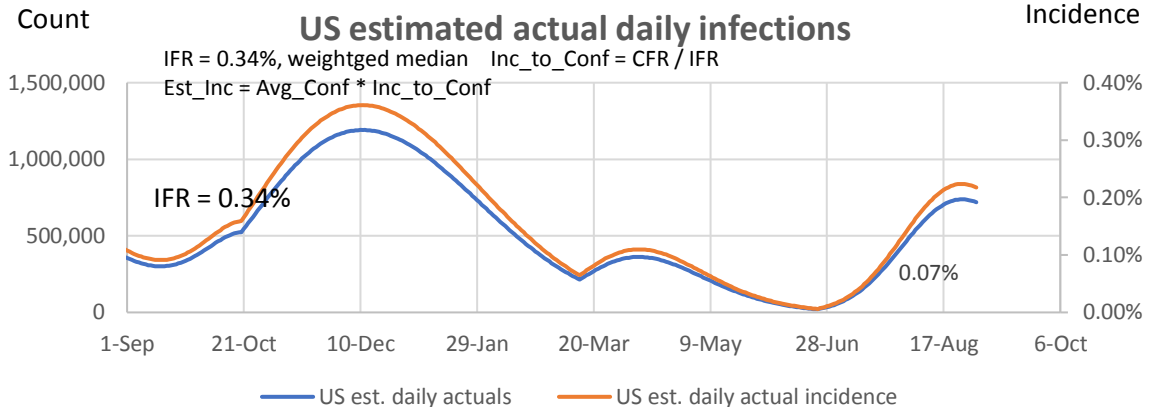
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely



### 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% |

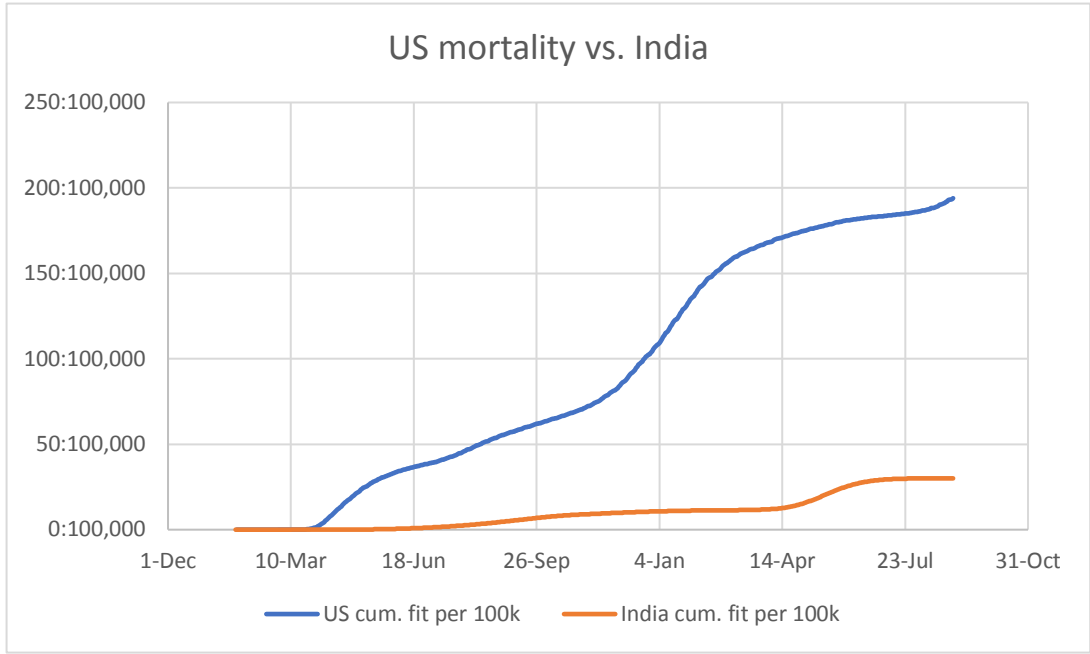
False pos. is more than half of total positives.

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 | 29% of All-Cause excess deaths are non-CV19 |
| 859:100,000  |   |

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

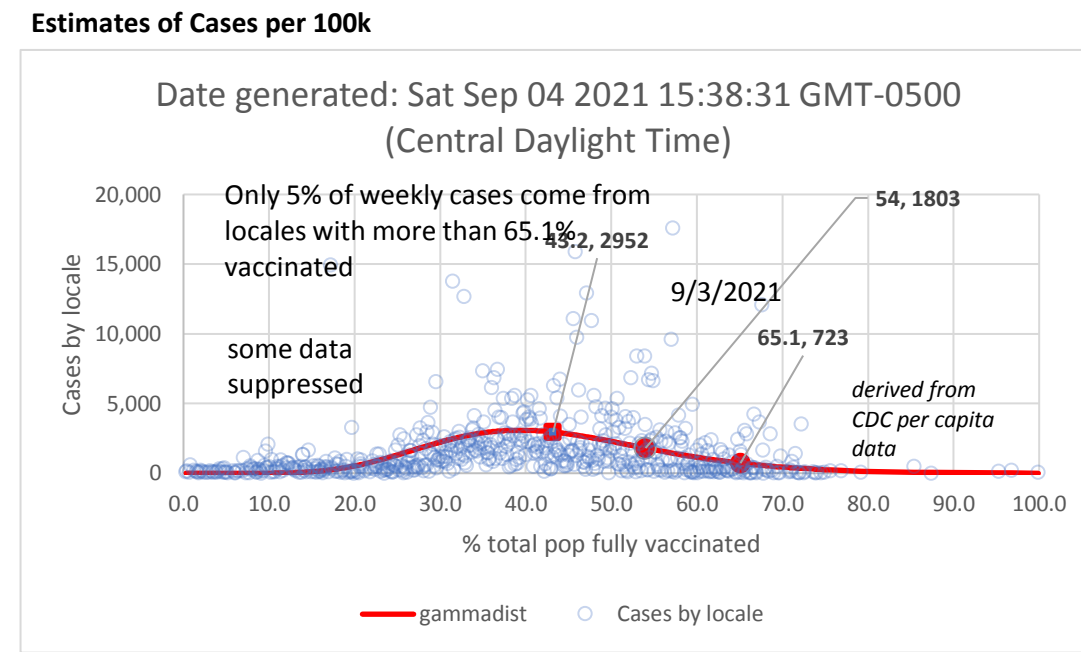
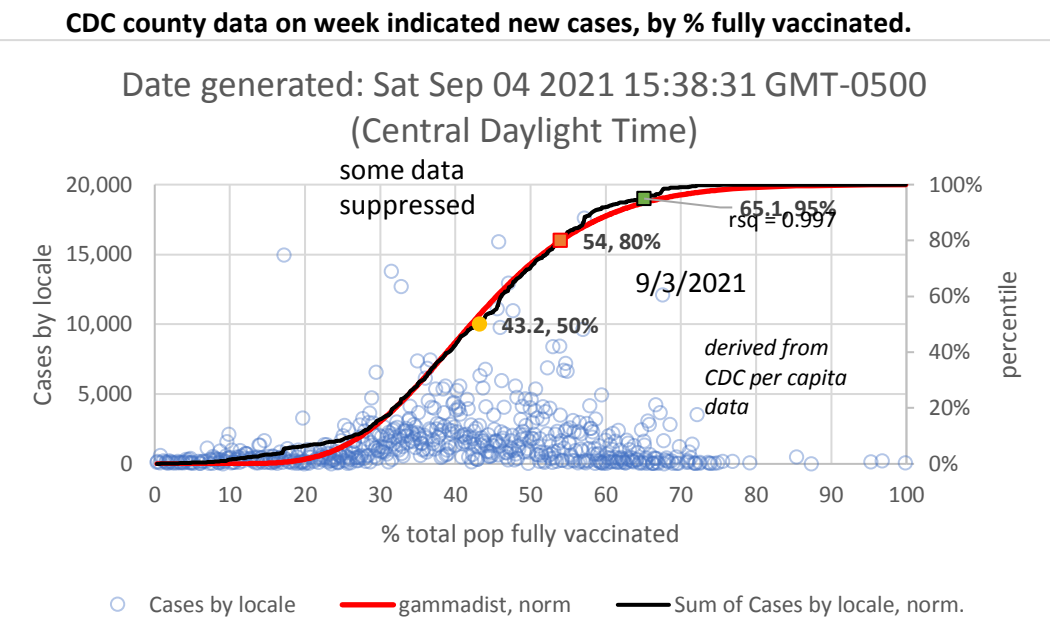
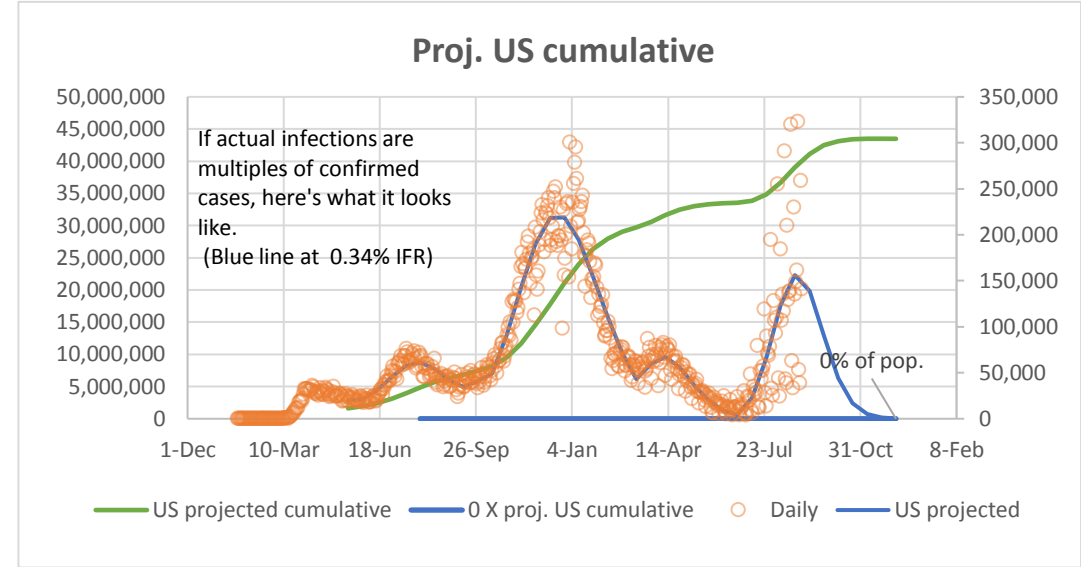
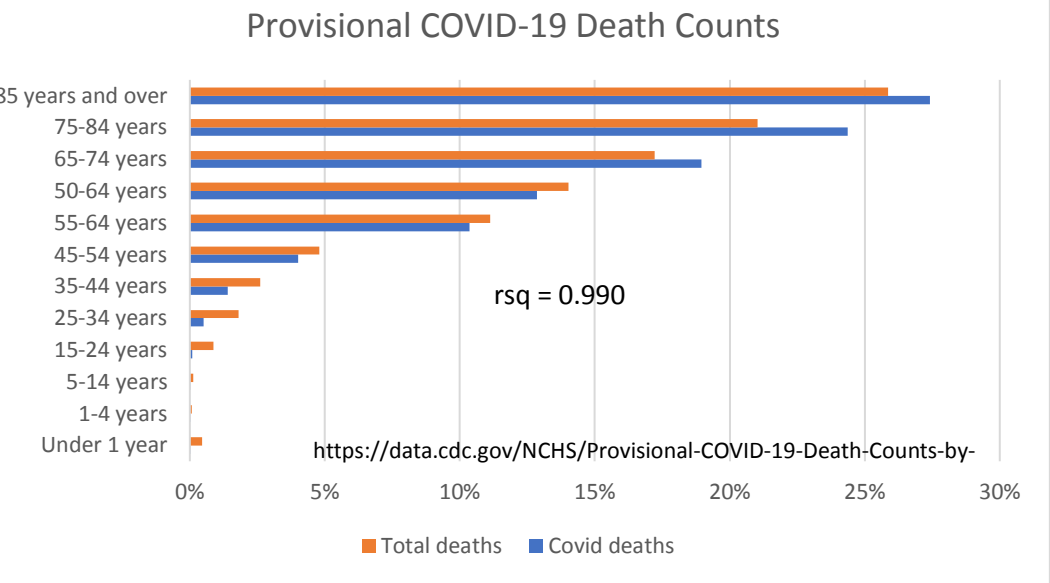
**USA Excess Deaths to date (from CDC data):**

| 34 weeks                 | All Cause   | All Cause, excl. CV19 | CV19       |
|--------------------------|-------------|-----------------------|------------|
| 3 yr average before 2020 | 556:100,000 | 556:100,000           | -          |
| 2021                     | 654:100,000 | 572:100,000           | -          |
| Diff.                    | 98:100,000  | 16:100,000            | 82:100,000 |

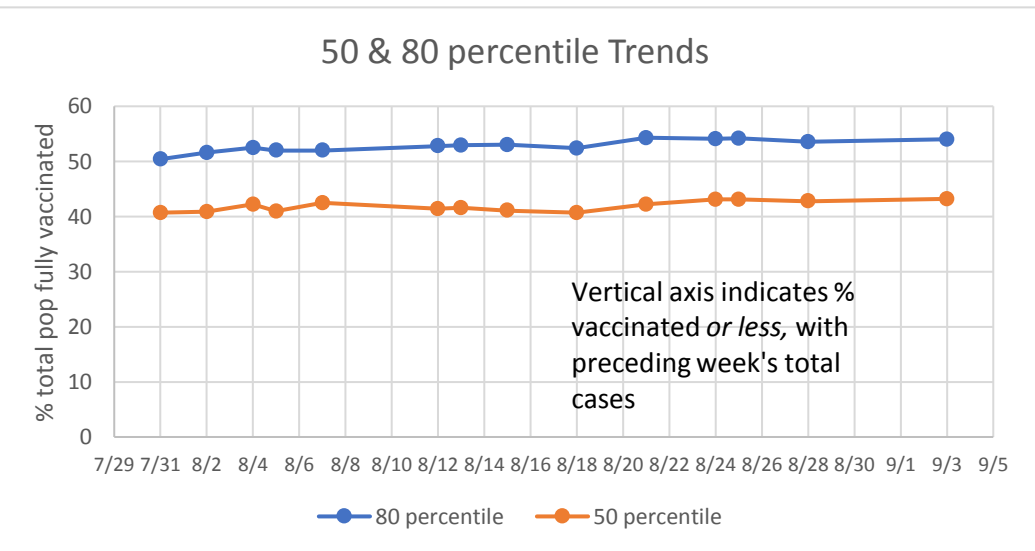
|              |   |
|--------------|---|
| 3 yr average | 16% of All-Cause excess deaths are non-CV19 |
| 859:100,000  |   |

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

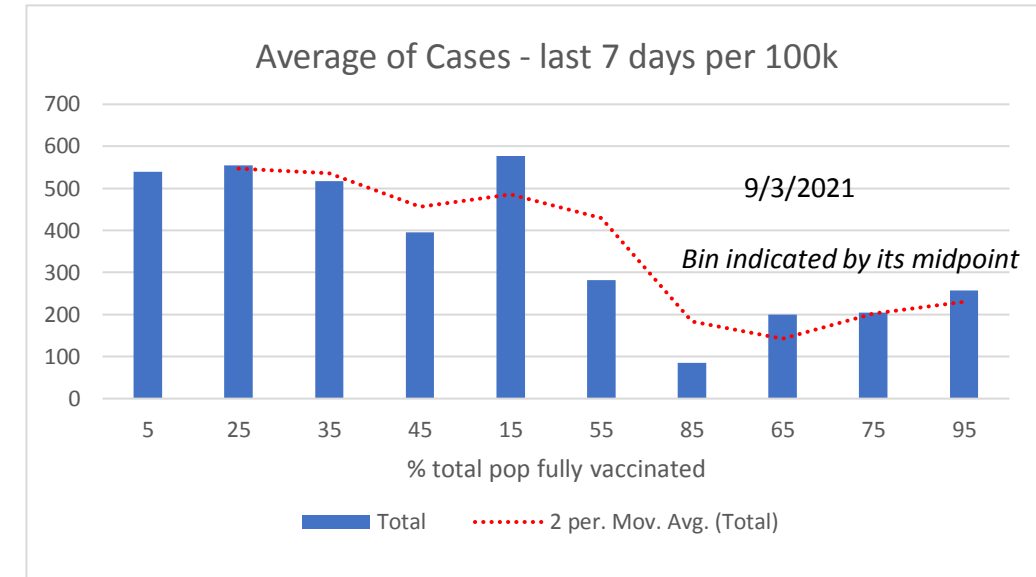
$K = 0.318$      $R_o :$      $R :$   
 $\gamma = 0.171$      $R_o = \exp(K/\gamma) = 6.42$     84%  
 $\gamma = 0.286$      $R > 1 - 1/R_o = 3.04$     67%     $\leq$  Herd immunity  
 $R$  is recovered variable.

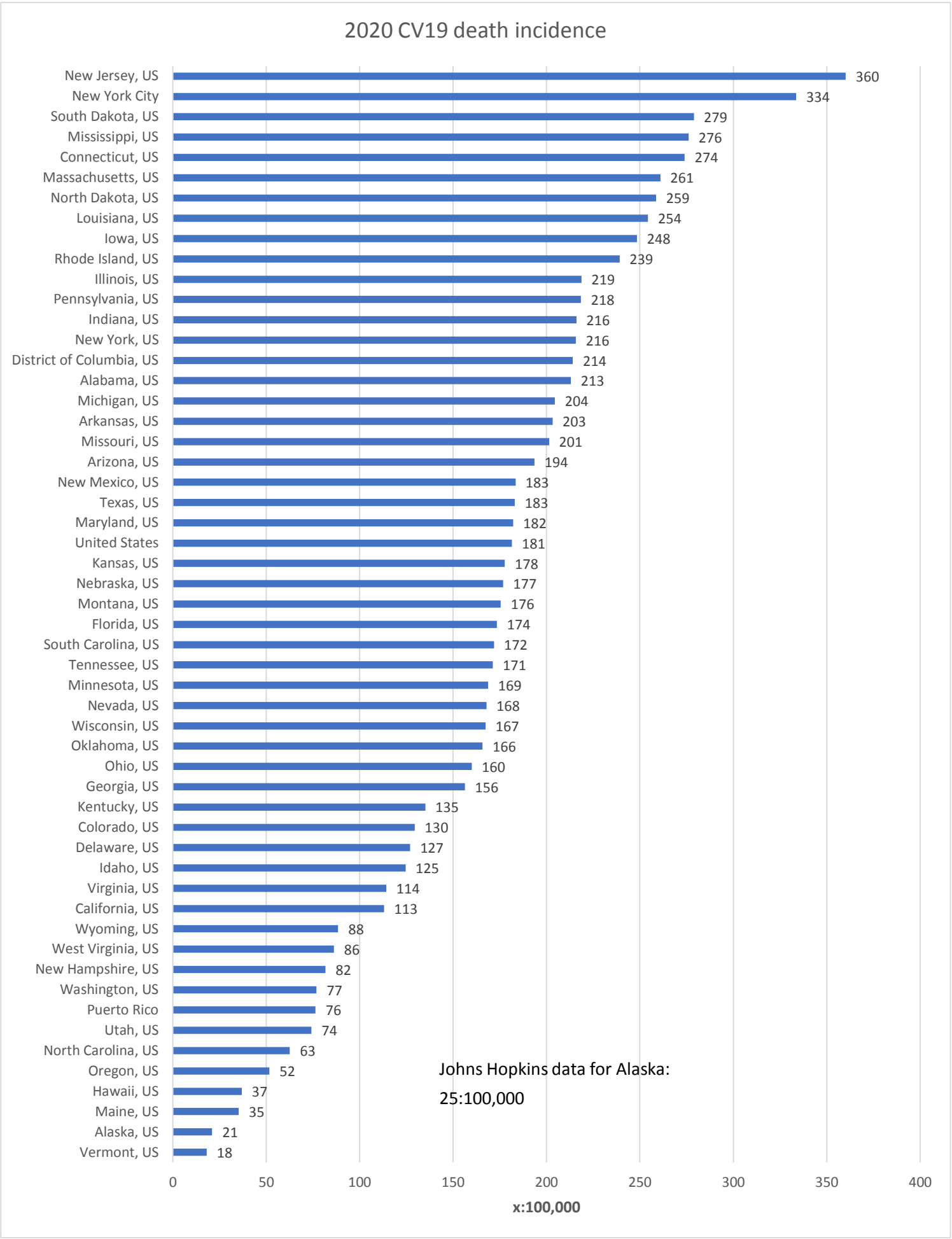


reporting jurisdictions is not a uniform distribution; some data suppressed, for example Texas



<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>