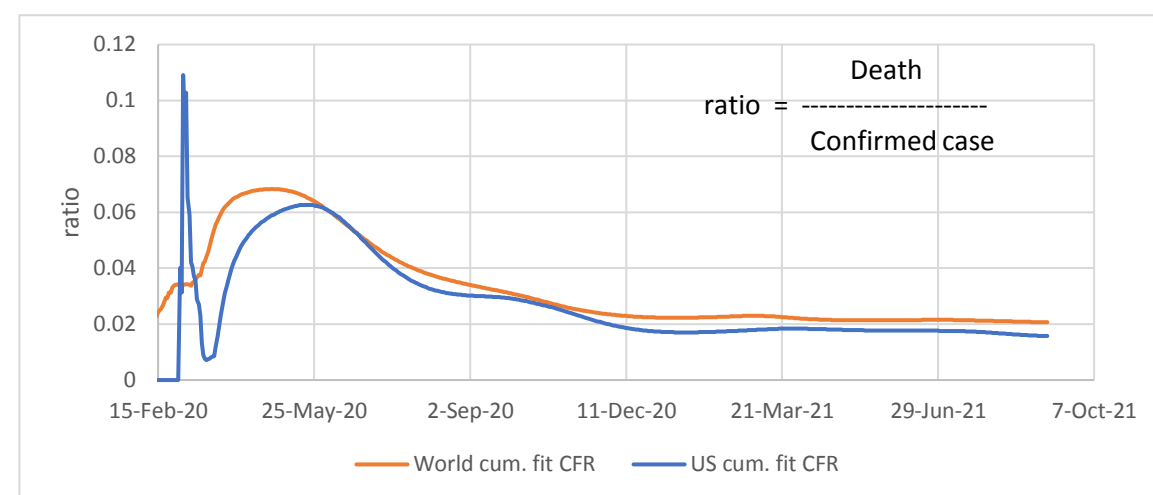
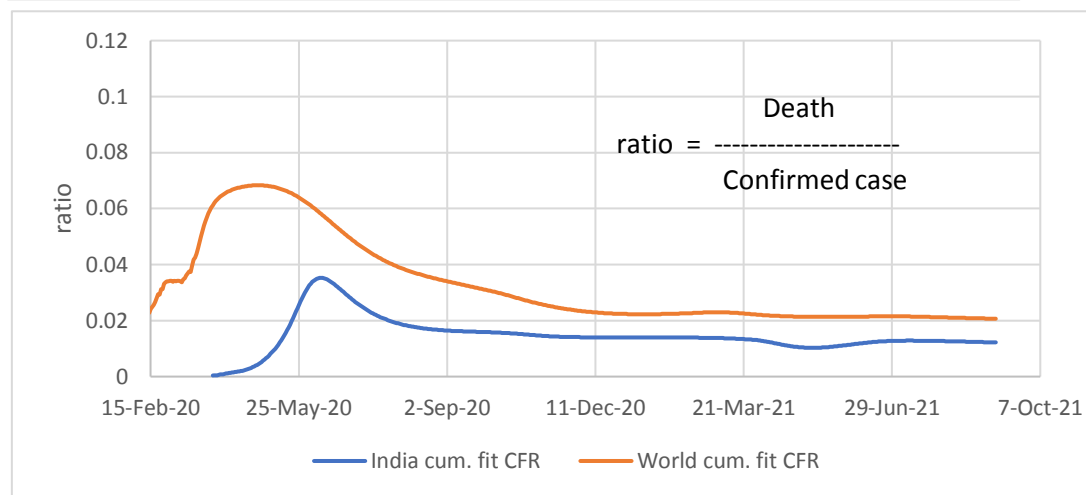
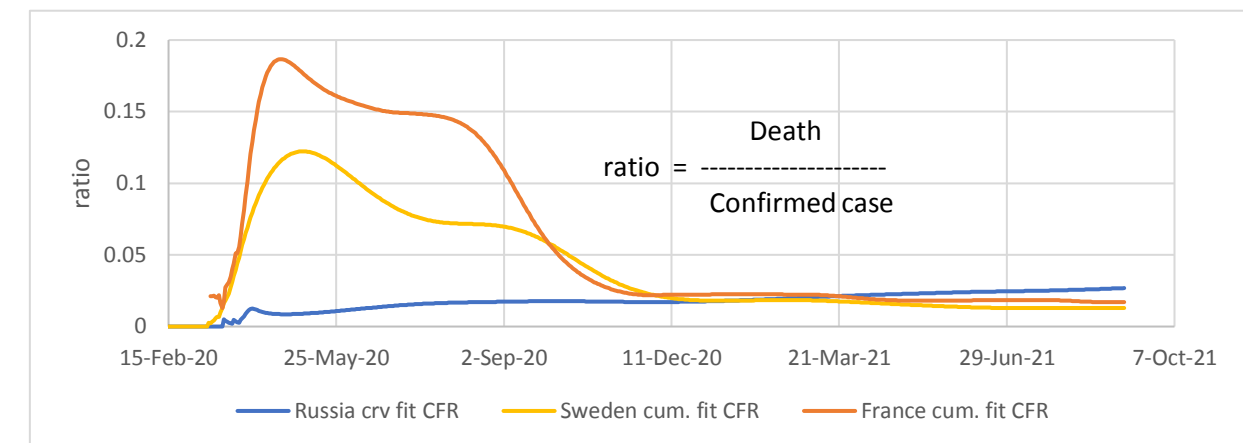
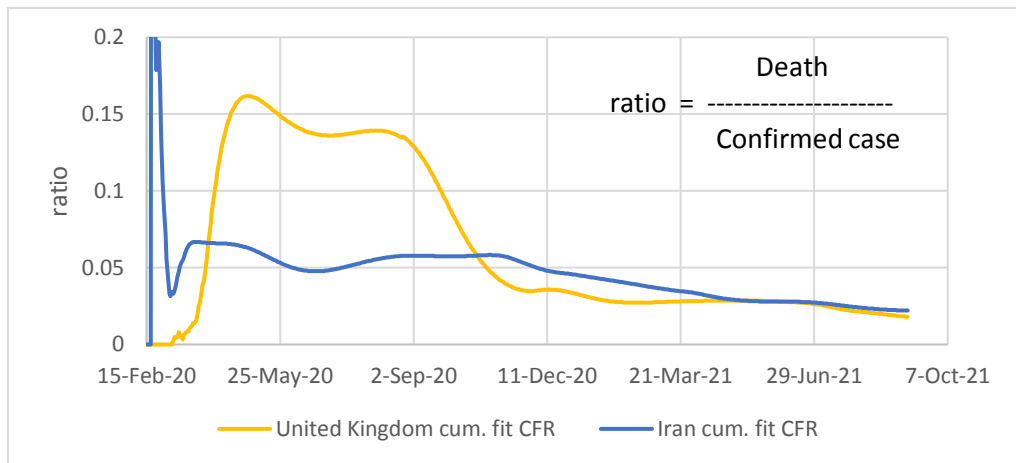
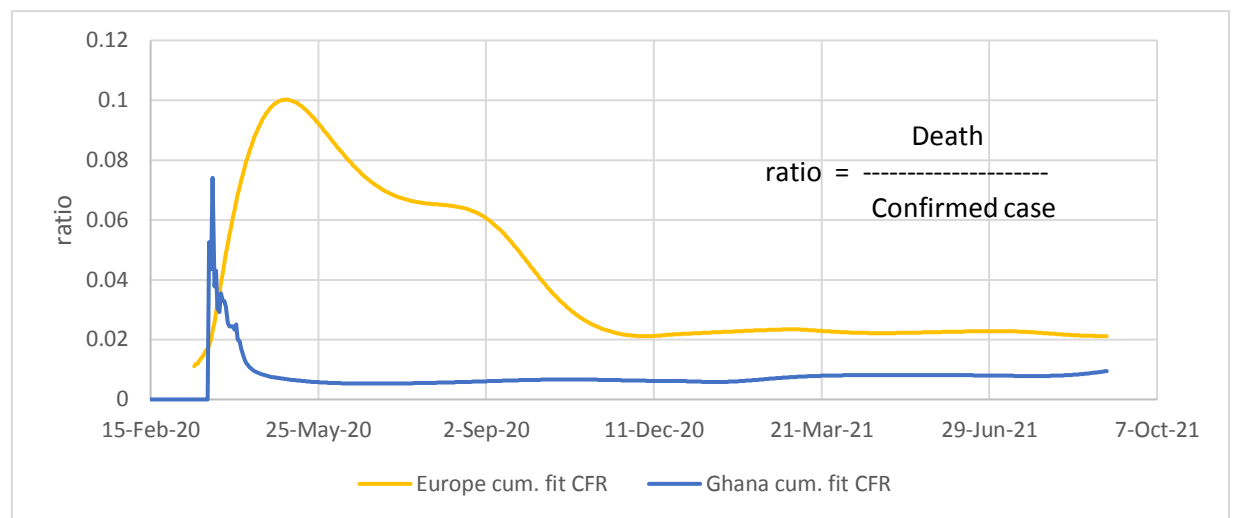
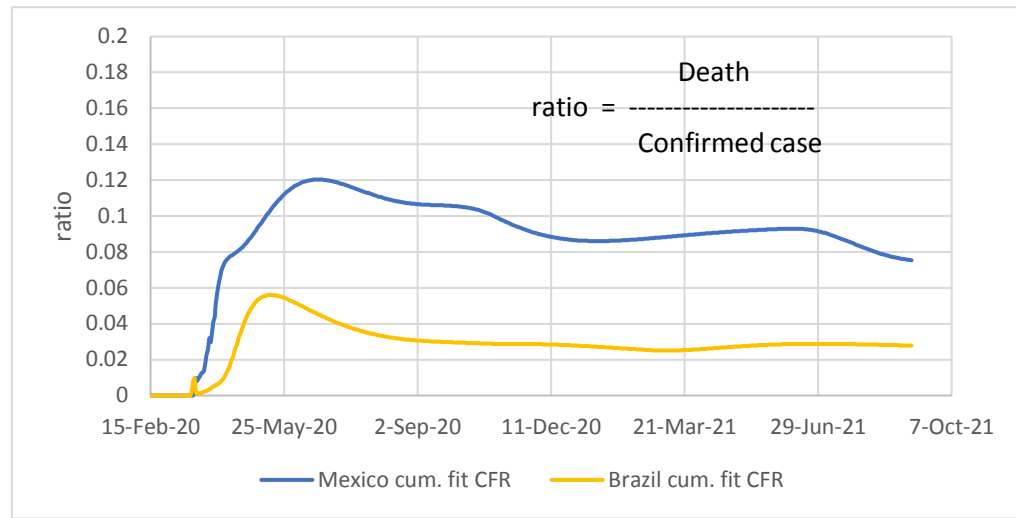
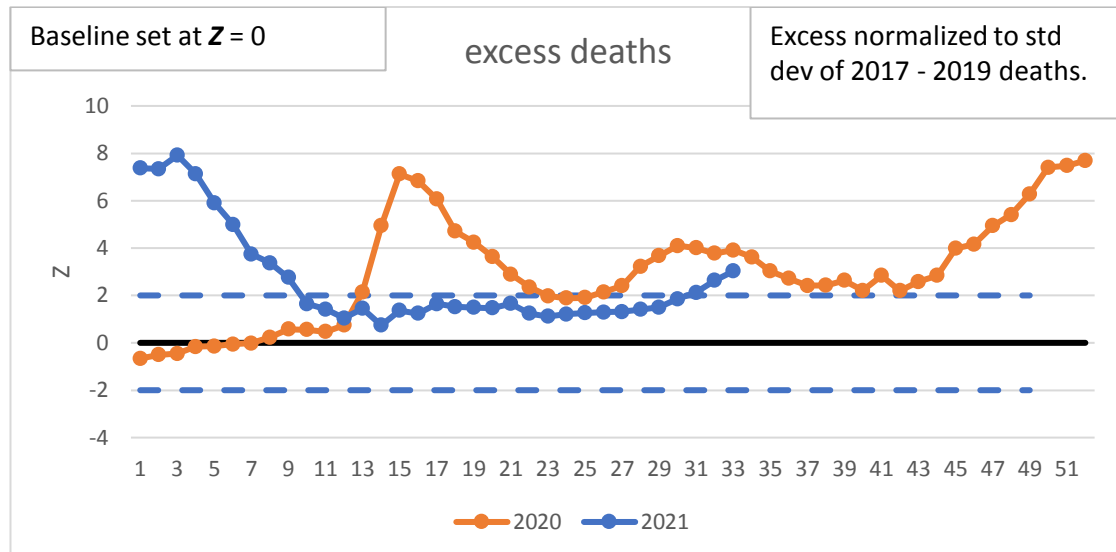


Experimental page : ratios of curve fit deaths to curve fit confirmed cases (CFR)

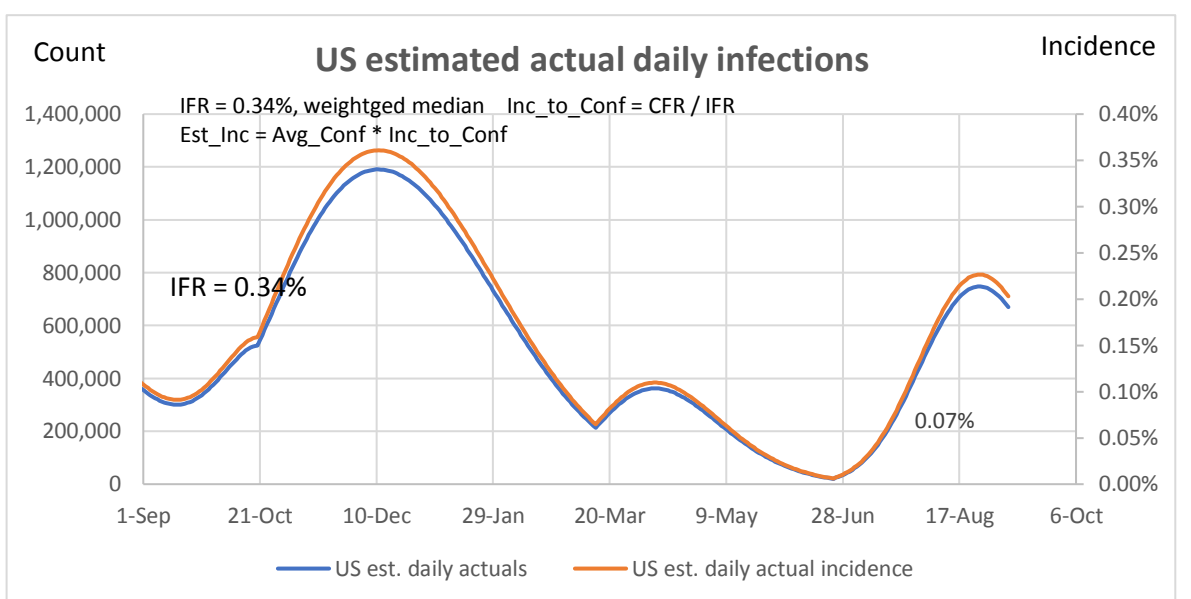
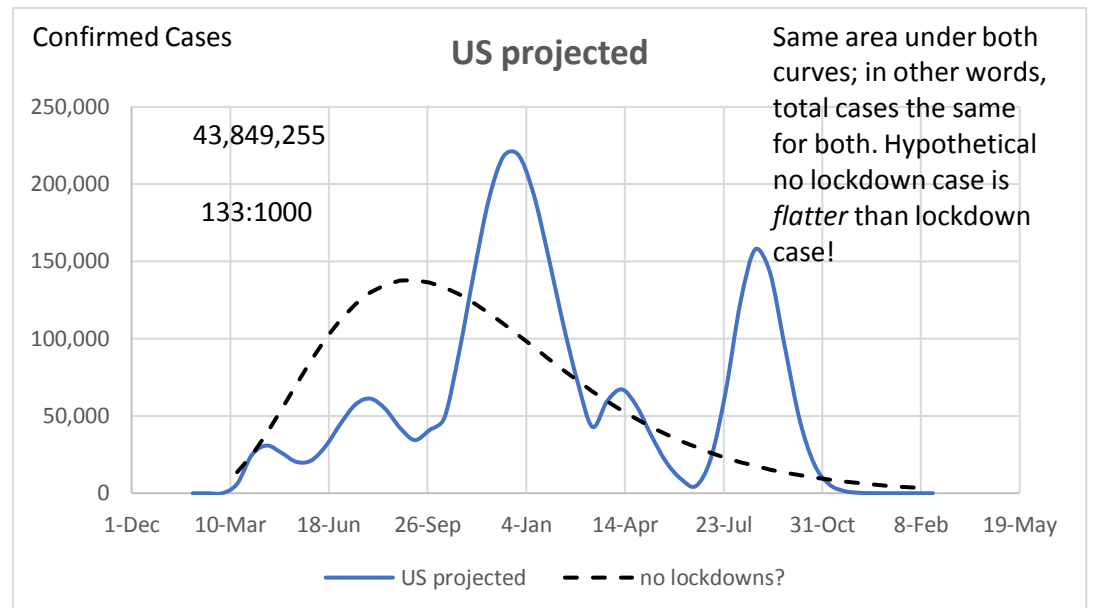
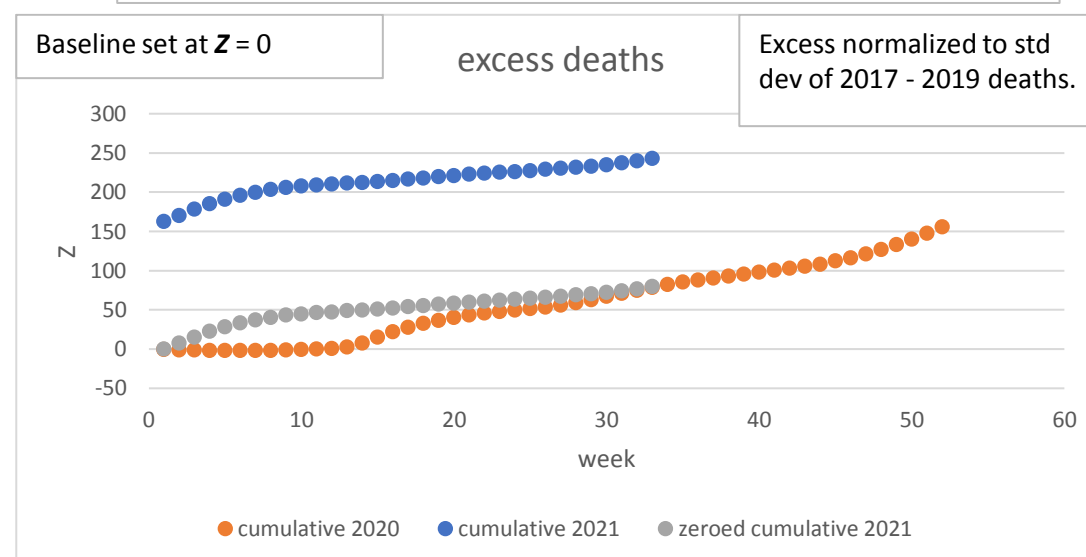


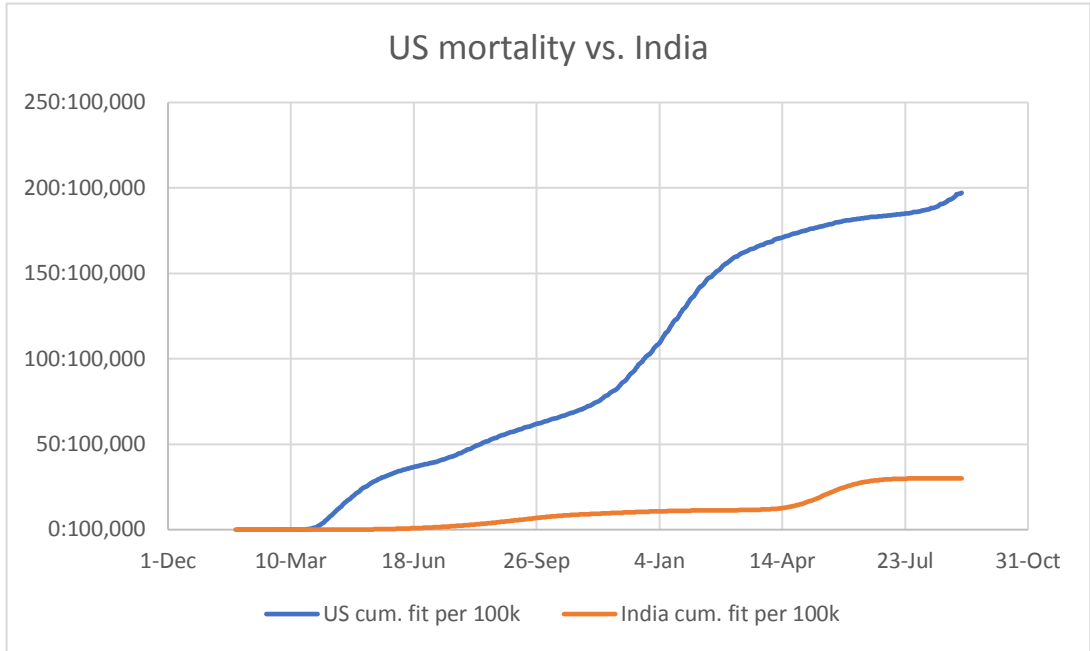
Excess deaths as a Z score:



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





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>

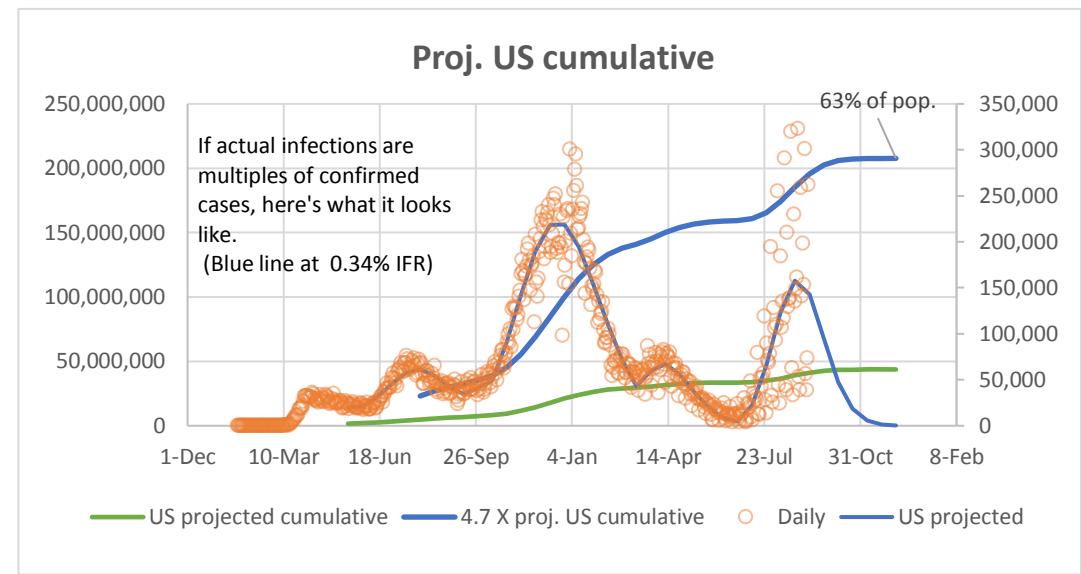
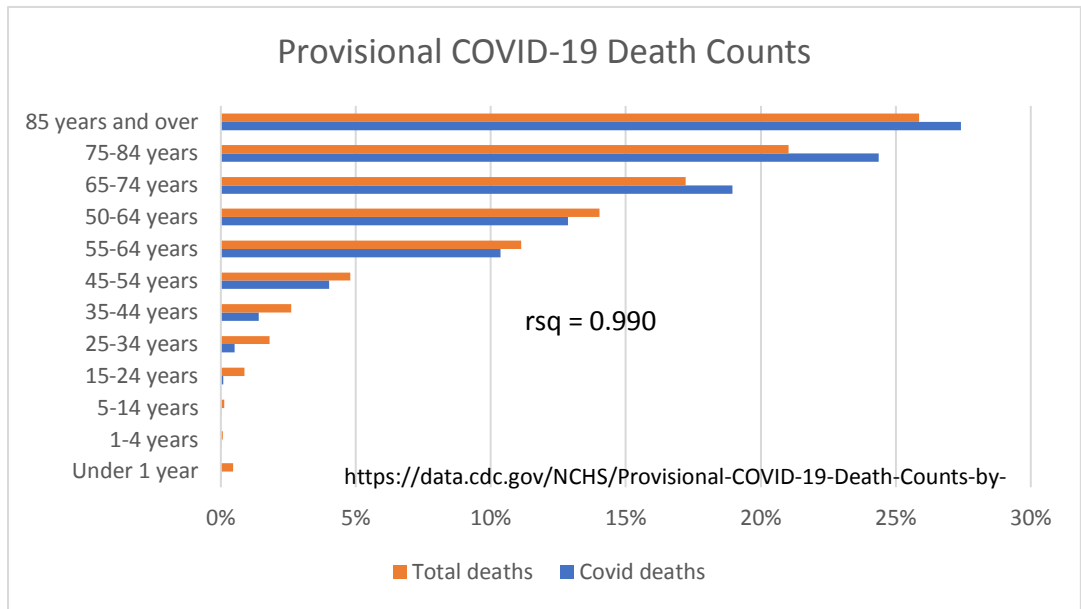
USA Excess Deaths to date (from CDC data):

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

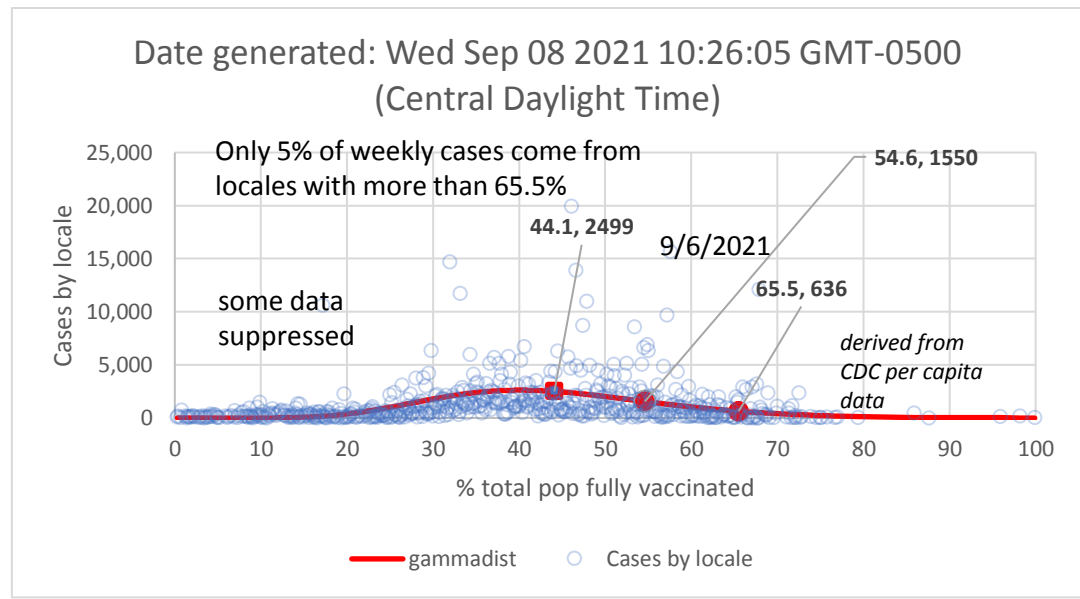
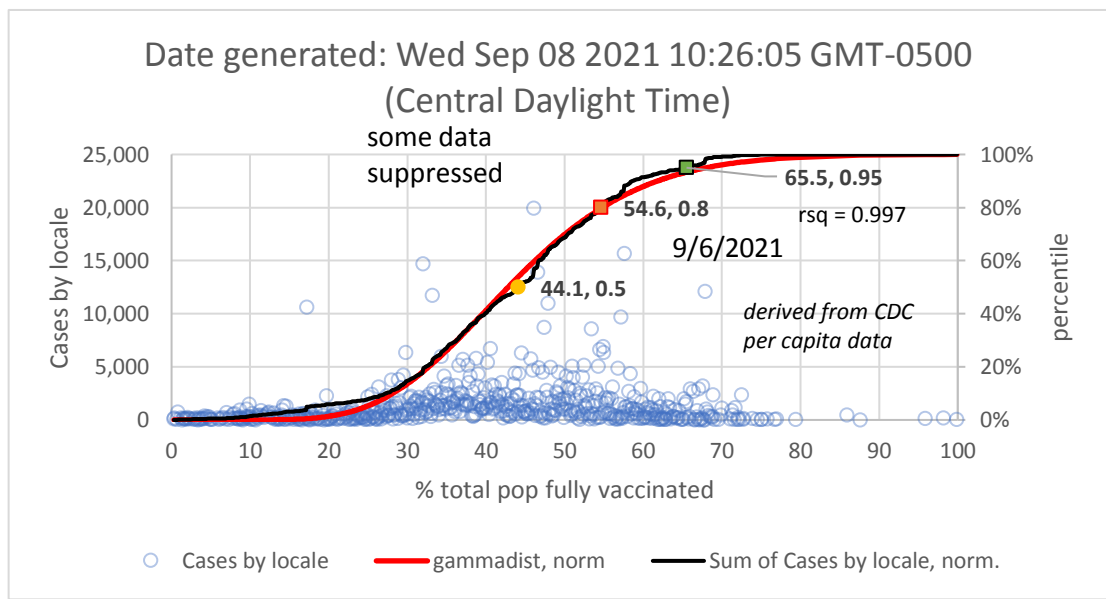
3 yr average
859:100,000

16% of All-Cause excess deaths are non-CV19
<https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkxf-xrst/data>

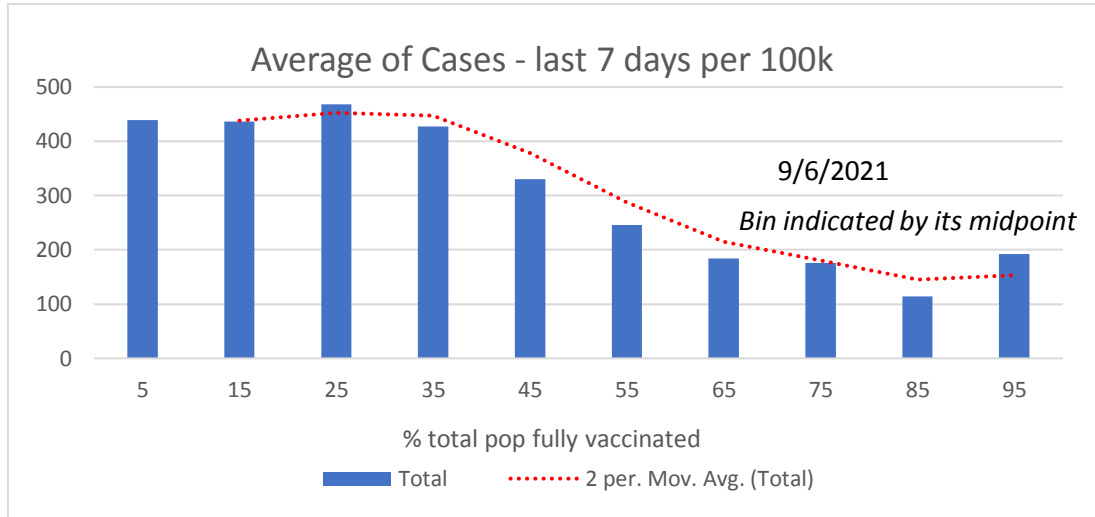
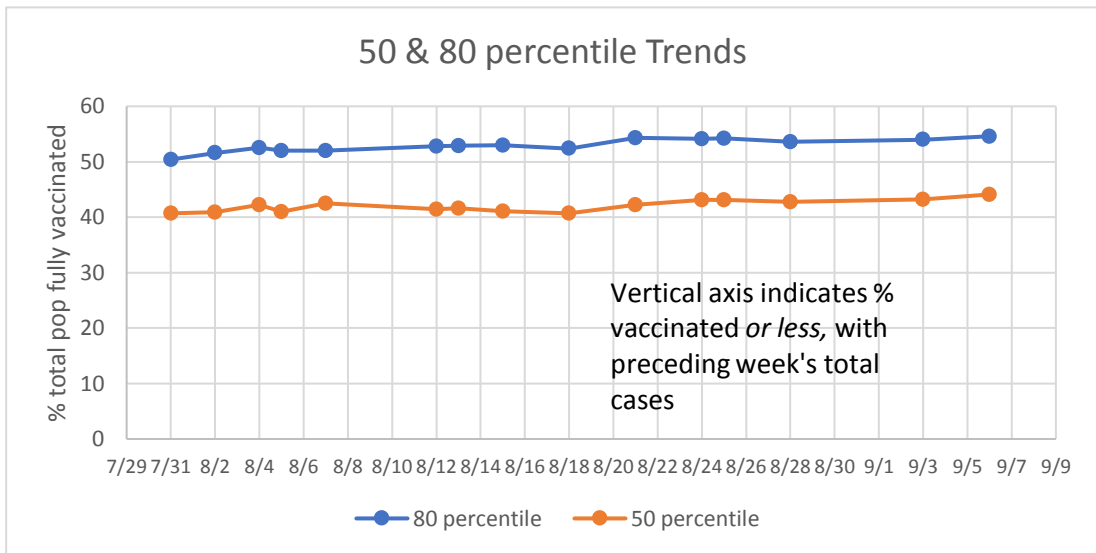
$K = 0.318$ $R_o :$ $R :$
 $\gamma = 0.171$ $R_o = \exp(K/\gamma) = 6.42$ 84%
 $\gamma = 0.286$ $R > 1 - 1/R_o = 3.04$ 67% \leq Herd immunity
R is recovered variable.



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

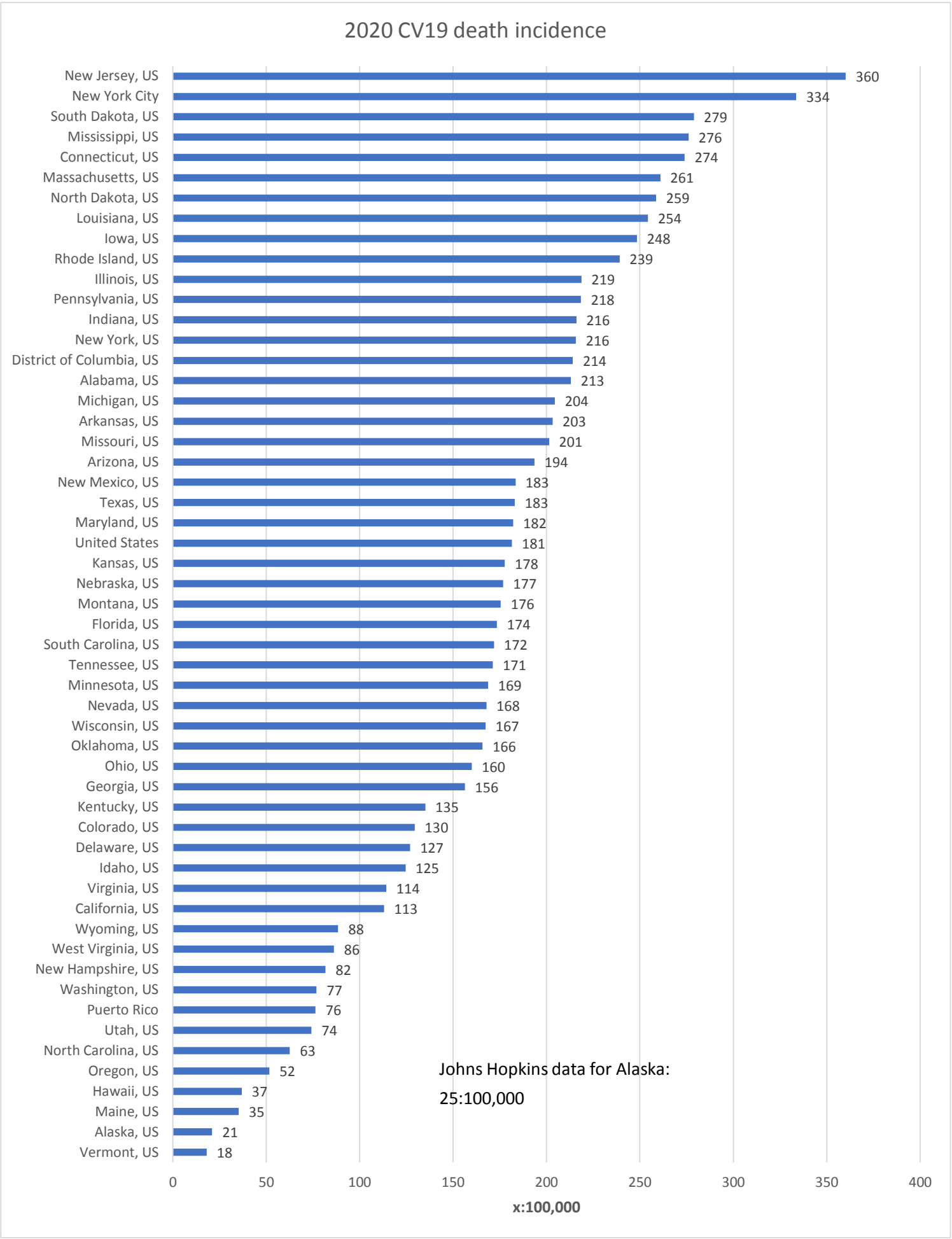


reporting jurisdictions is not a uniform distribution; some data suppressed, for example Texas



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

Estimates of Cases per 100k



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