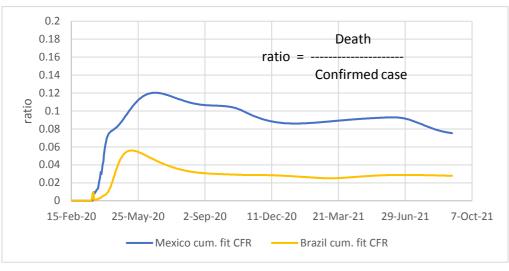
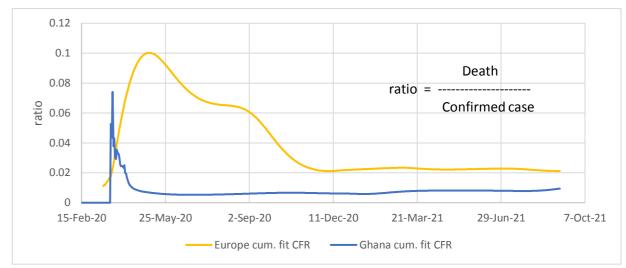
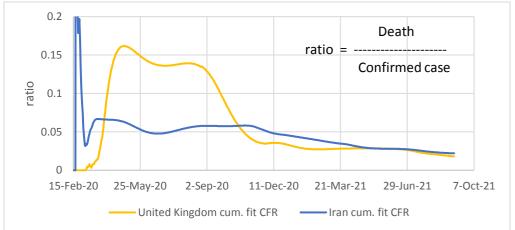
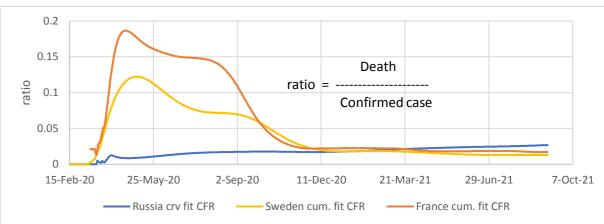
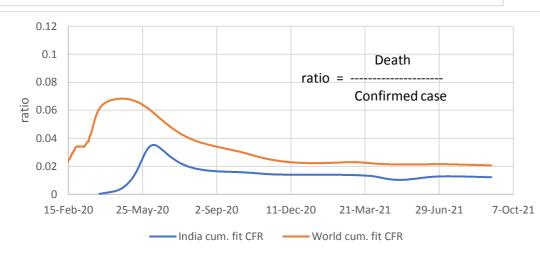
# Experimental page: ratios of curve fit deaths to curve fit confirmed cases (CFR)

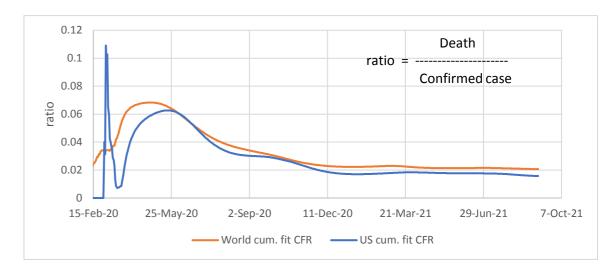




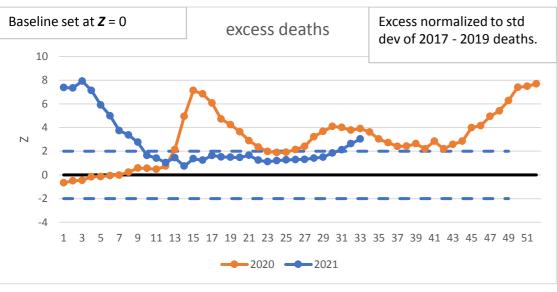


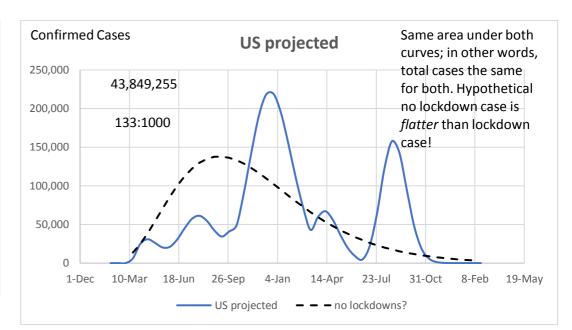






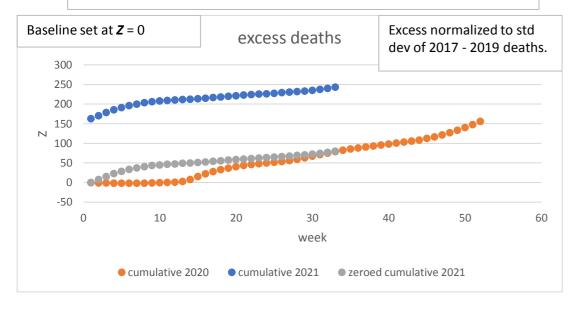
### Excess deaths as a Z score:

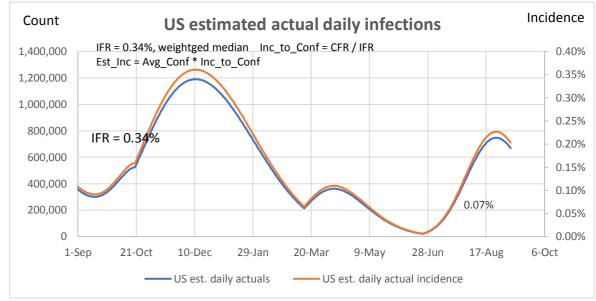




Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.

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





# US mortality vs. India 250:100,000 200:100,000 150:100,000 100:100,000 50:100,000 0:100,000 31-Oct 1-Dec 10-Mar 18-Jun 26-Sep 4-Jan 14-Apr 23-Jul 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	

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):**

	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

63% of pop.

31-Oct

350,000

300,000

250,000

200,000

150,000

100,000

50,000

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

K = 0.318 $R_o$ : *R* : gamma = 0.171  $R_o = \exp(K/\text{gamma}) = 6.42$ 84% <=Herd immunity  $R > 1 - 1/R_{\odot}$ 67% gamma = 0.286 = 3.04

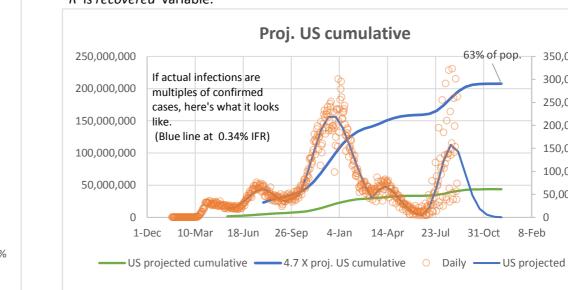
Proj. US cumulative

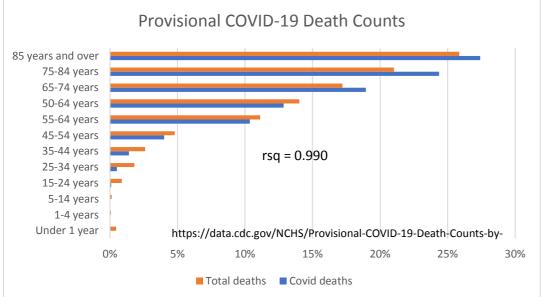
4-Jan

14-Apr

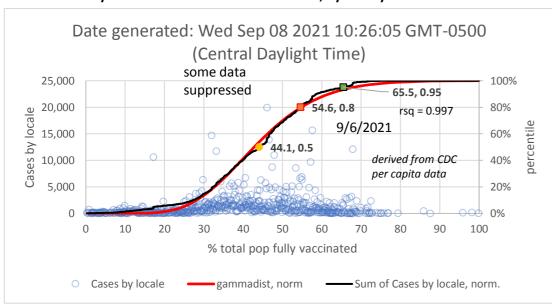
23-Jul

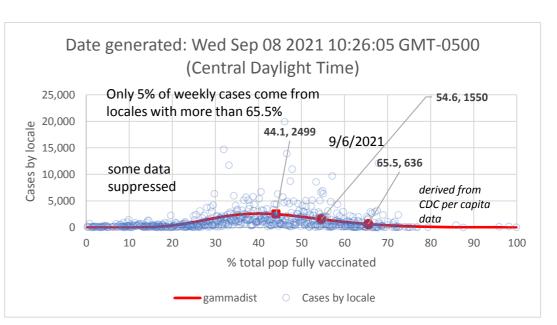
R is recovered variable.



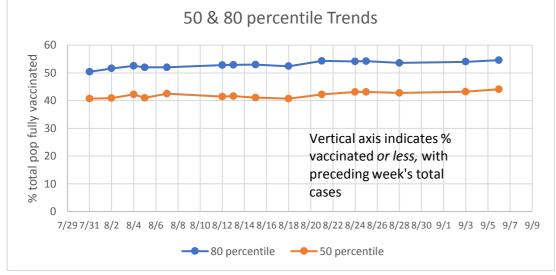


### CDC county data on week indicated new cases, by % fully vaccinated.





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



Average of Cases - last 7 days per 100k 500 400 9/6/2021 300 Bin indicated by its midpoint 100 15 25 35 % total pop fully vaccinated ······ 2 per. Mov. Avg. (Total)

Estimates of Cases per 100k



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