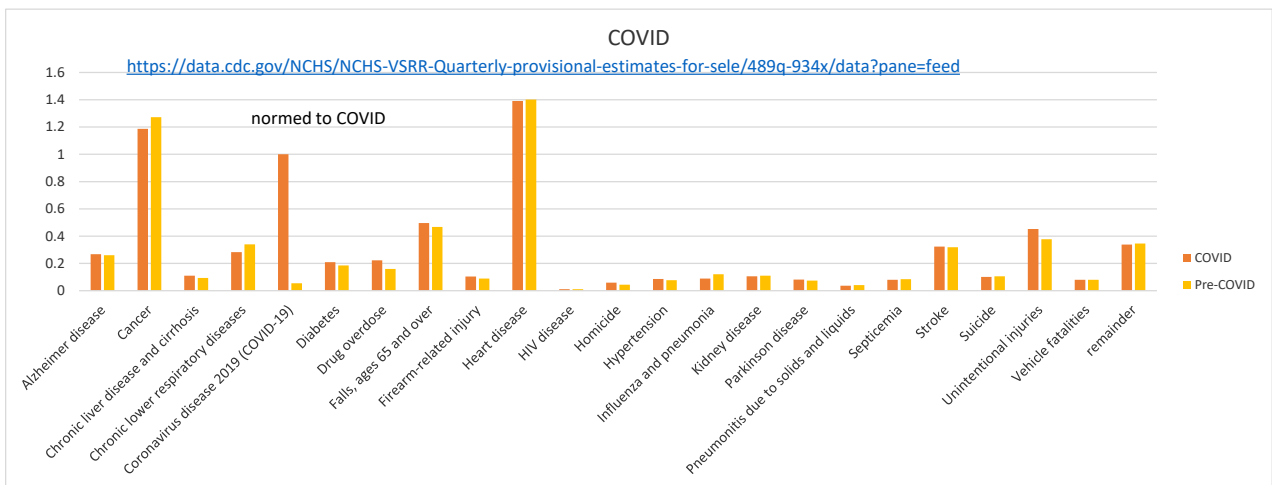
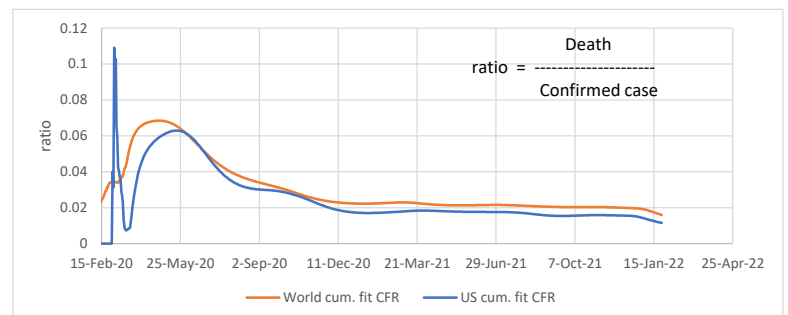
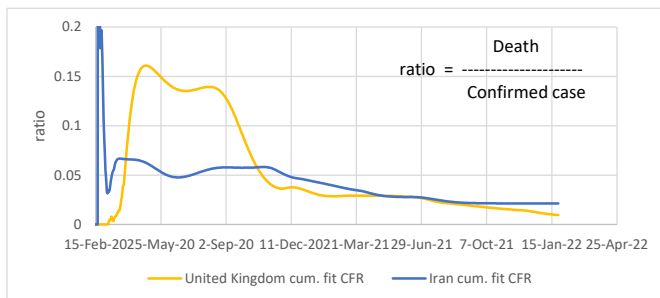


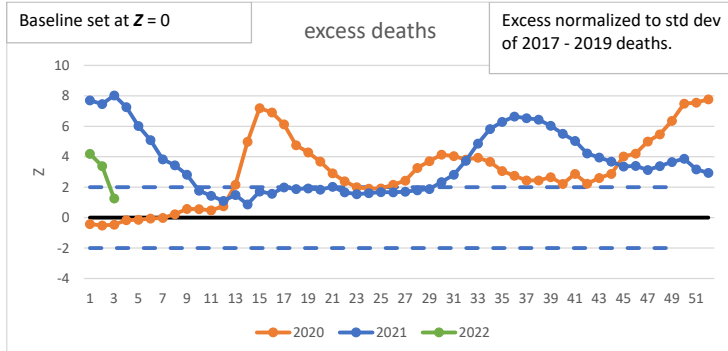
# Common causes of death, normalized to COVID. Pre-Covid: 1Q2017 thru 1Q2020, Post-Covid 2Q2020 thru 1Q2021



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

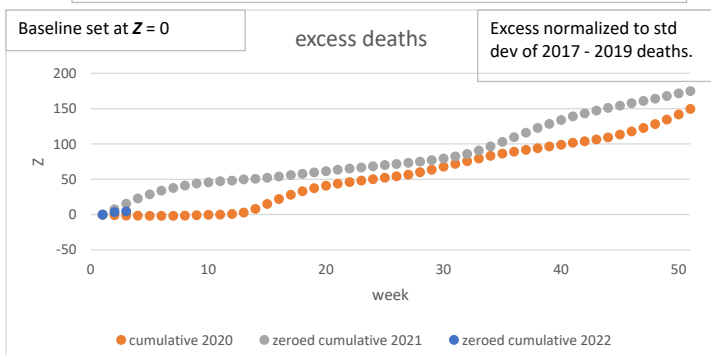


## Excess deaths as a Z score:

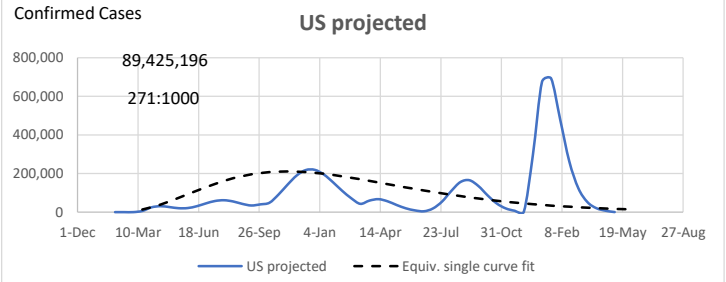


Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.

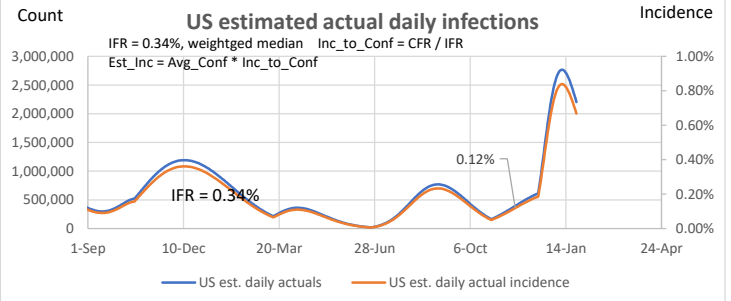
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely



## Confirmed Cases



## Count



## False Positives Demonstration

Use 0.15% as estimated daily incidence

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

95% accuracy of test

	Positive	Negative
test pos	1.995%	4.895%
test neg	0.105%	93.005%
	2.100%	97.900%

False pos. is more than half of total positives.

TRUE +	1.995%/6.89%	29.0%
FALSE +	4.895%/6.89%	71.0%
Total		100.00%

0.15% X 14 = 2.100%

## Sensitivity

Probability of detection where condition exists

True + / (True + & False -)

95%

## Specificity

Probability of not detecting where condition doesn't exist

True - / (True - & False +)

95%

Example only; sensitivity and specificity not necessarily equal.

#### 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 (2021, from CDC data):

52 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	859:100,000	859:100,000	-
2021	1045:100,000	903:100,000	-
Diff.	186:100,000	44:100,000	142:100,000

3 yr average

859:100,000
-------------

24% of All-Cause excess deaths not CV19

Linear Year Projection

142:100,000

#### USA Excess Deaths to date (2022, from CDC data):

3 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	34:100,000	34:100,000	-
2022	58:100,000	48:100,000	-
Diff.	25:100,000	14:100,000	11:100,000

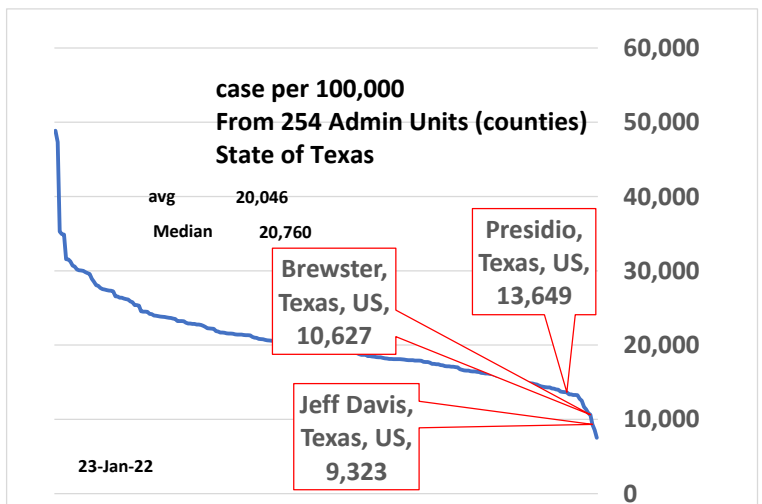
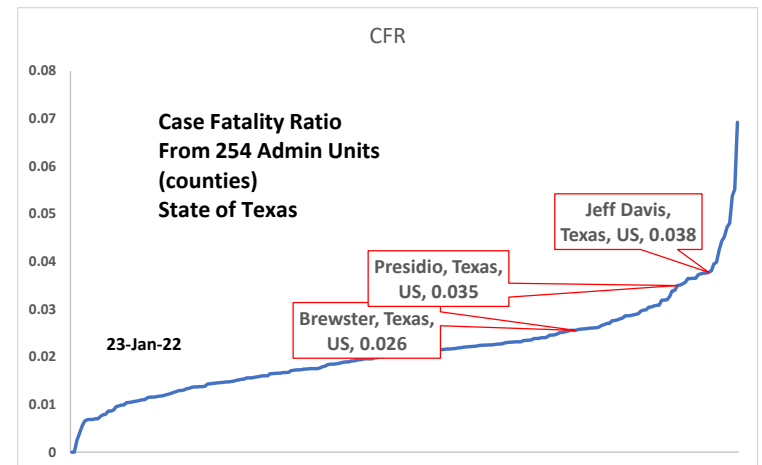
3 yr average
859:100,000

56% of All-Cause excess deaths not CV19

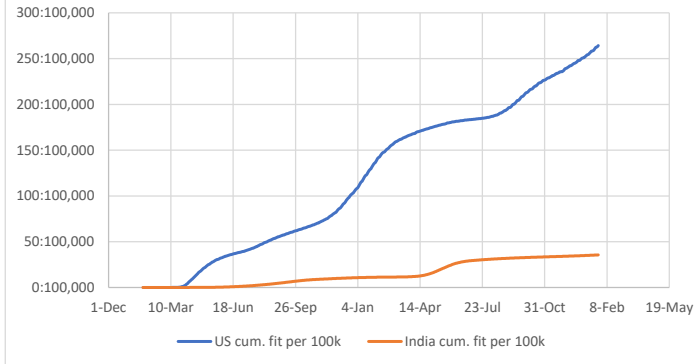
Linear Year Projection

275:100,000

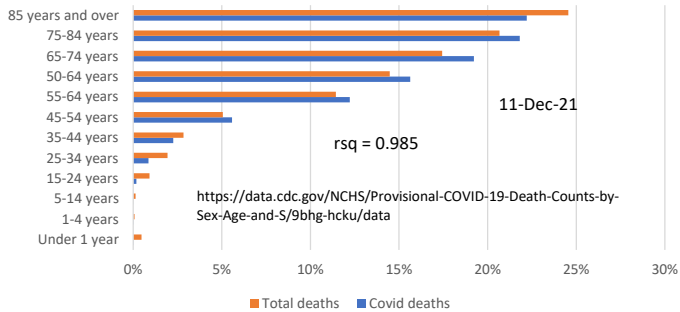
#### Tri-Counties in Texas:



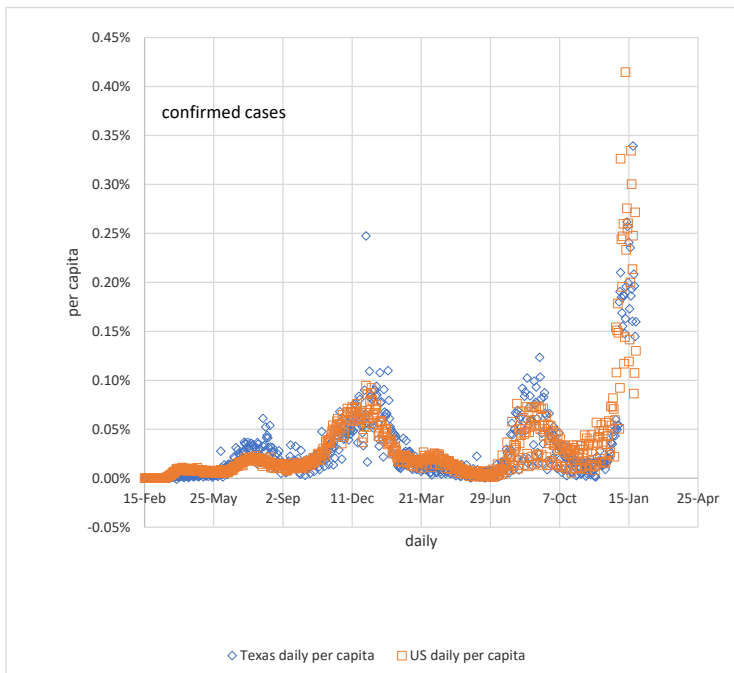
#### US mortality vs. India



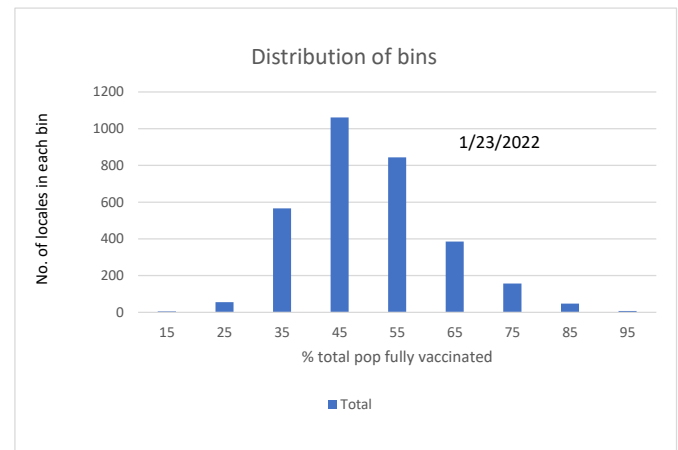
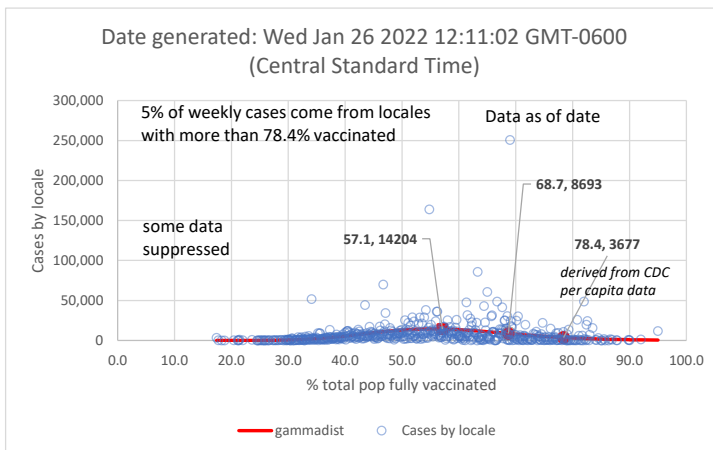
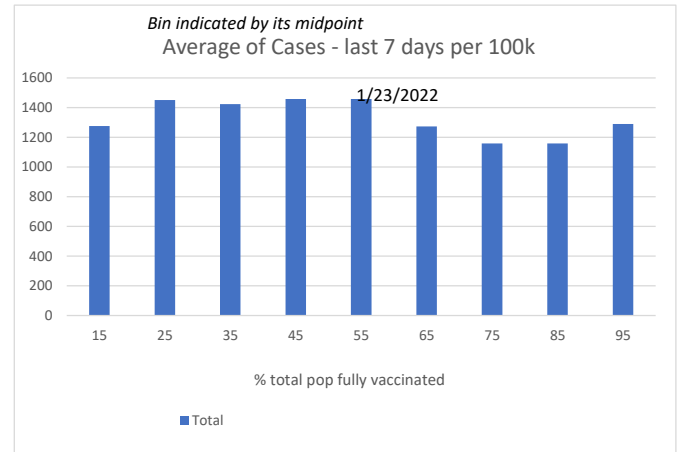
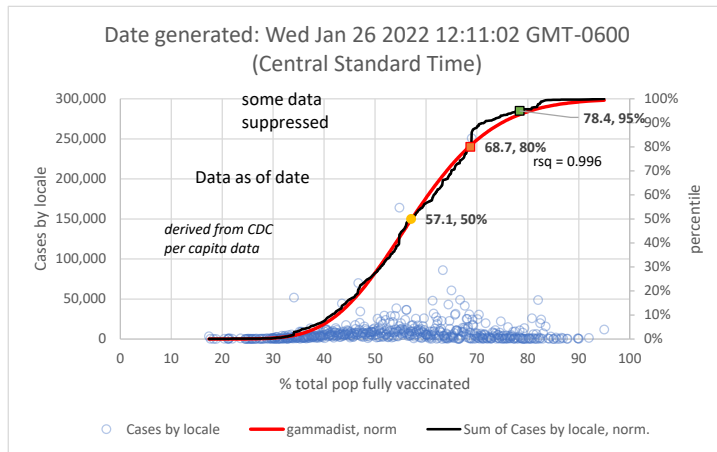
#### Provisional COVID-19 Death Counts



#### US vs. Texas



# Vaccination, % total pop vaccinated, and cases per 100k, USA



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