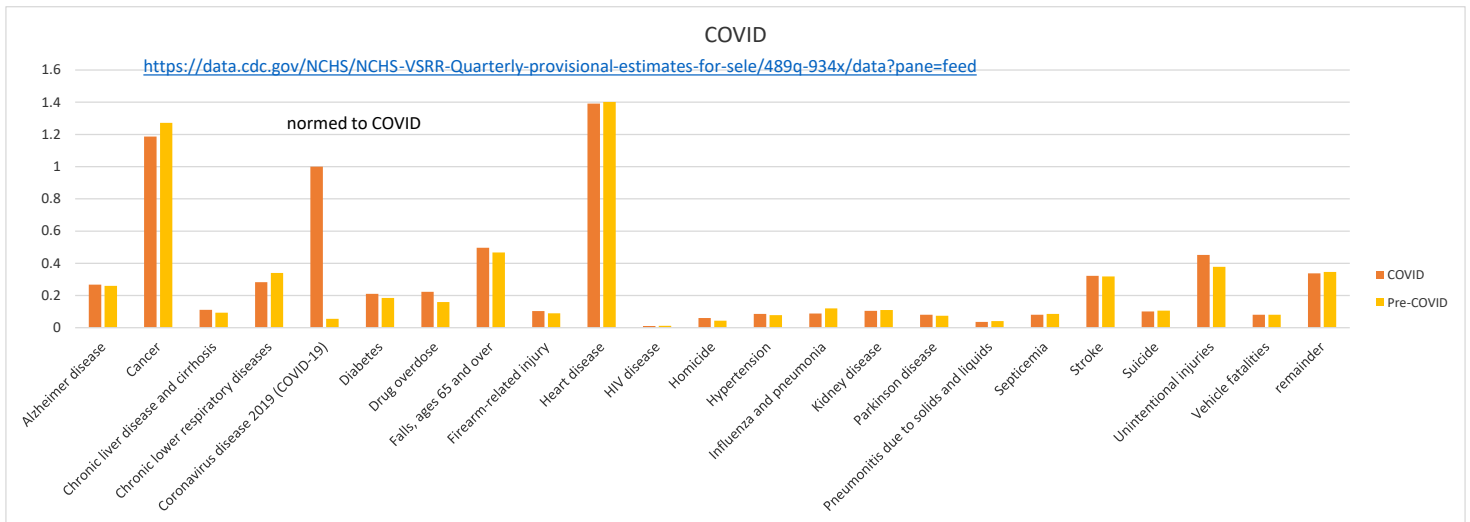
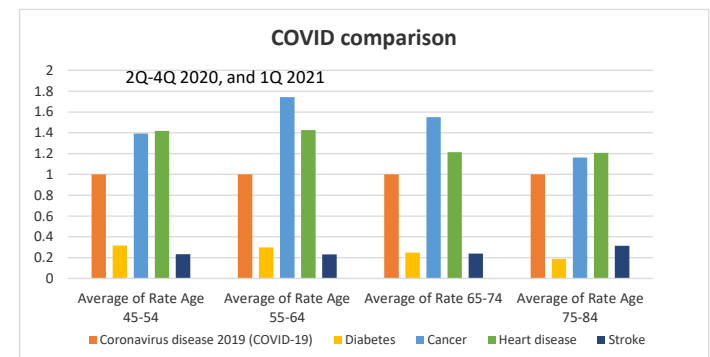
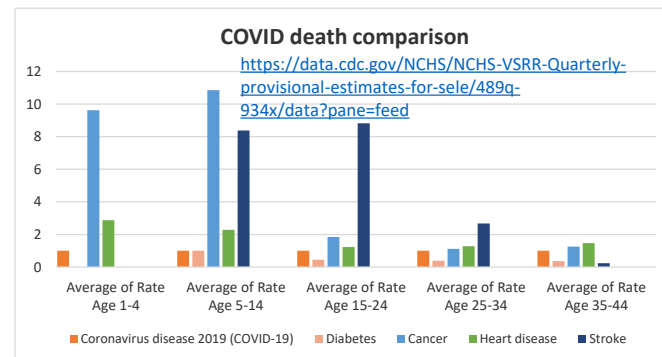
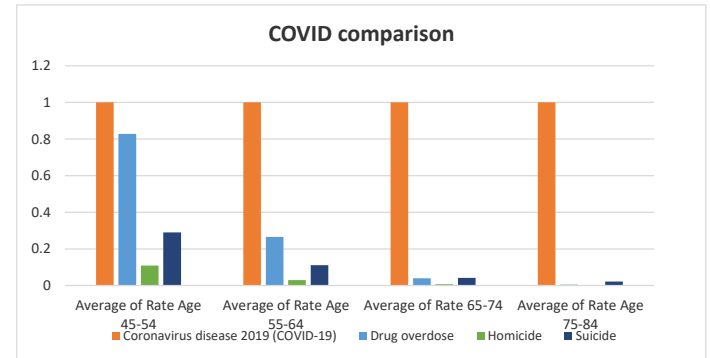
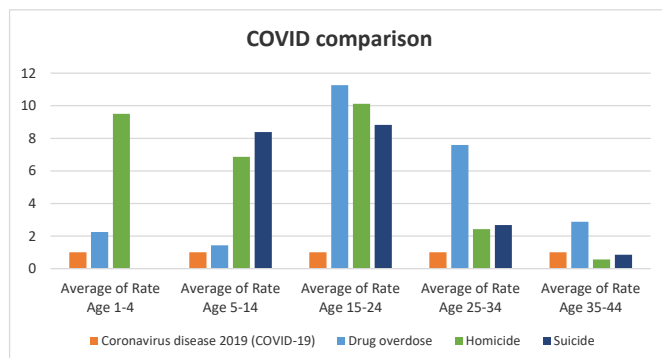


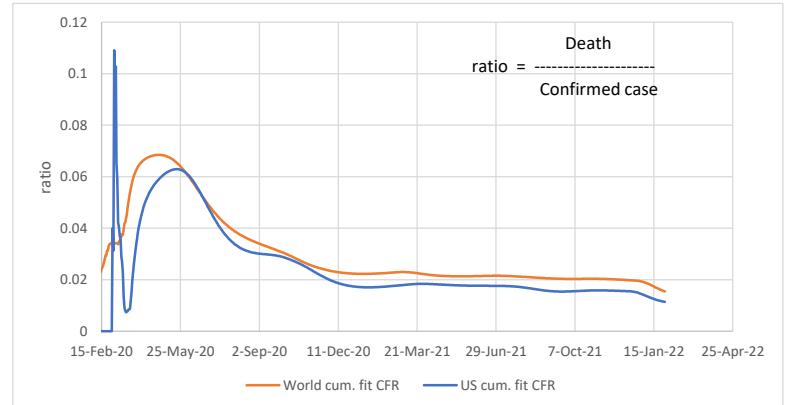
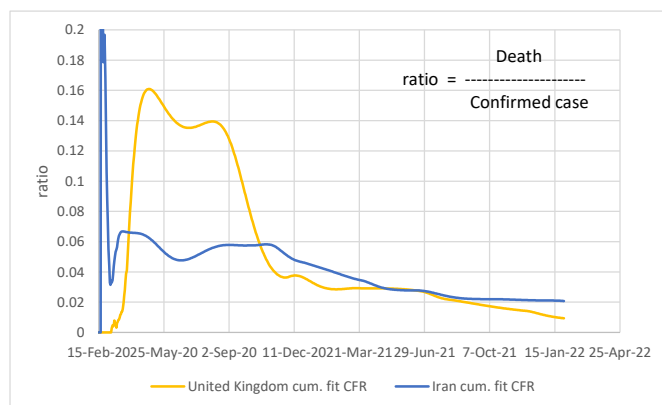
Common causes of death, normalized to COVID. Pre-Covid: 1Q2017 thru 1Q2020, Post-Covid 2Q2020 thru 1Q2021

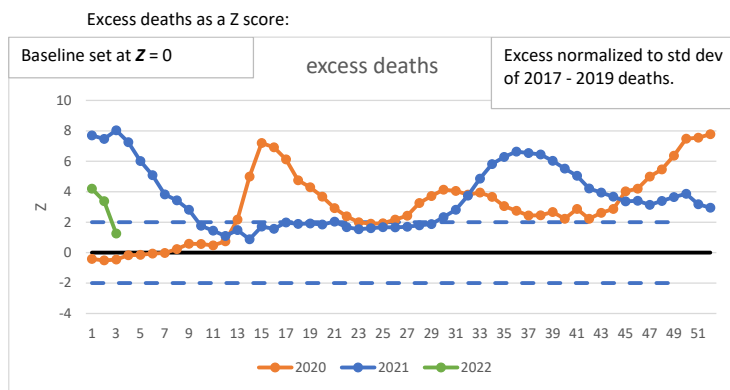


Relative effect of COVID on various age groups, and compared to cause of death. These are all relative to COVID, which is 1.0 on each of four charts



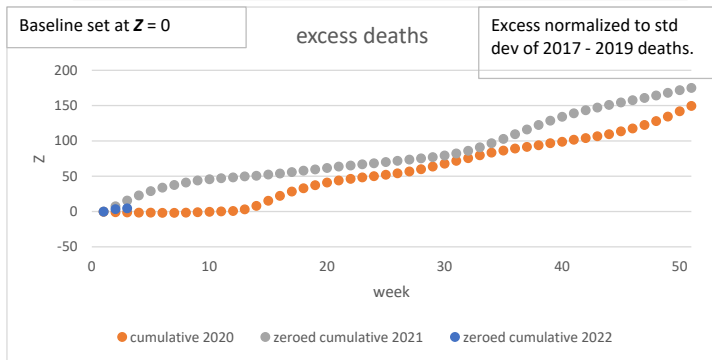
Ratios of curve fit deaths to curve fit confirmed cases (CFR)



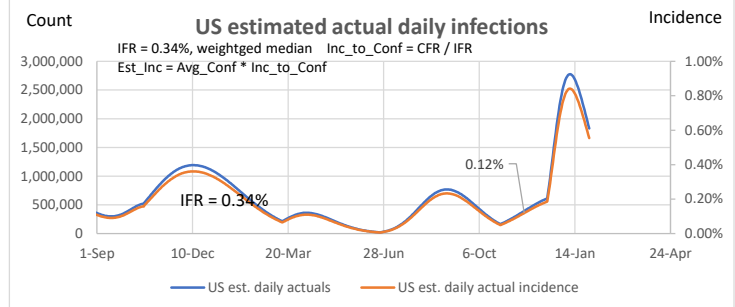
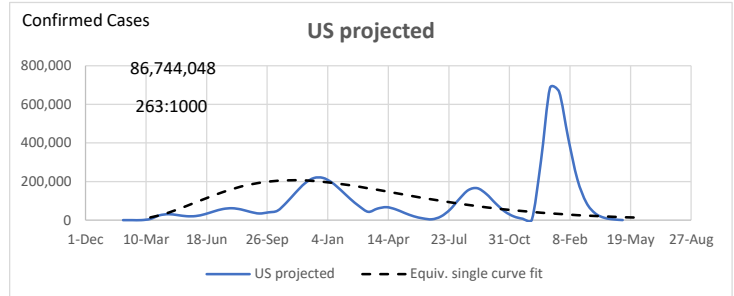


Above based on Z score of two standard deviation from 2017-2019. What follows is cumulative plot of same.

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



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



#### 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%

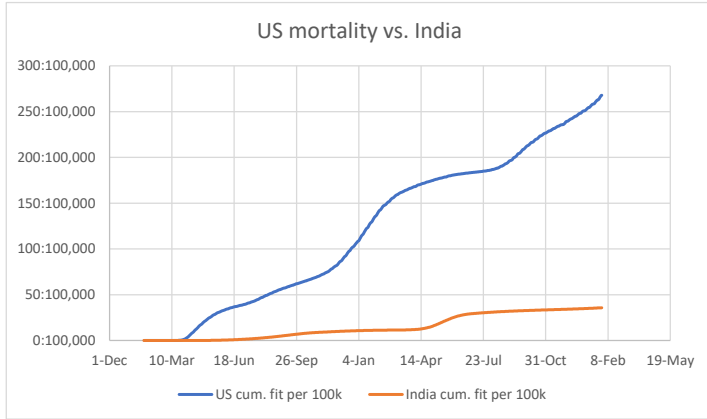
#### Sensitivity

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

#### 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

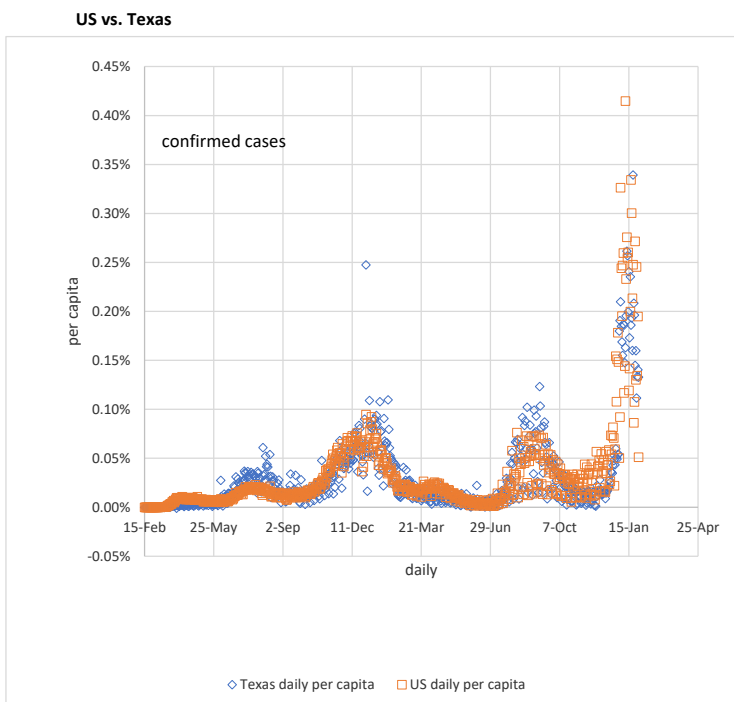
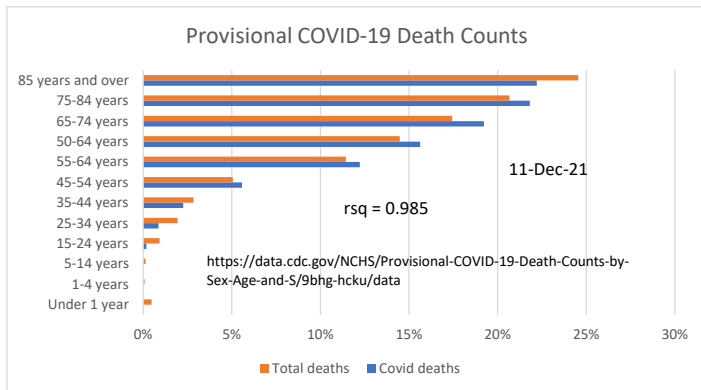
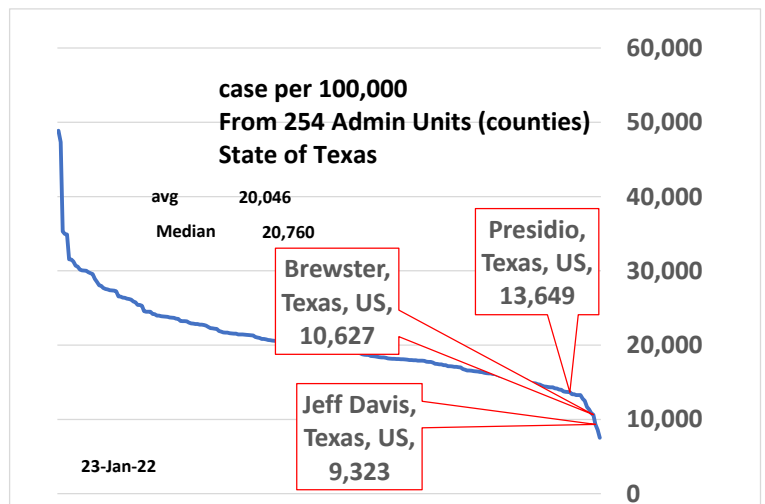
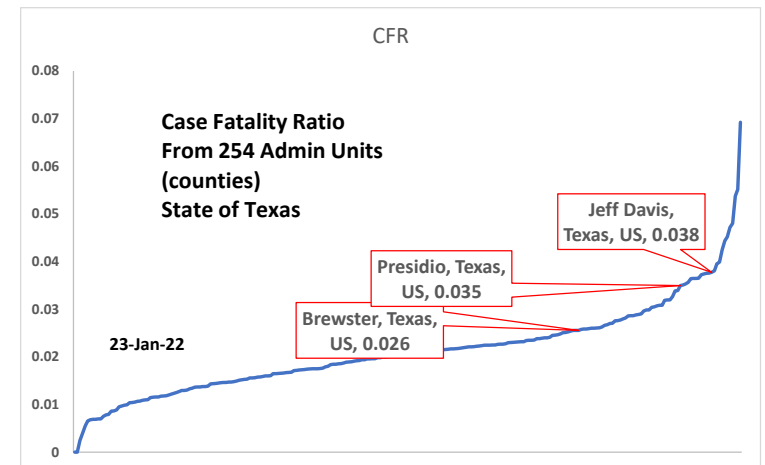
3 yr average	859:100,000	24% of All-Cause excess deaths not CV19	Linear Year Projection 142:100,000
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#### USA Excess Deaths to date (2022, from CDC data):

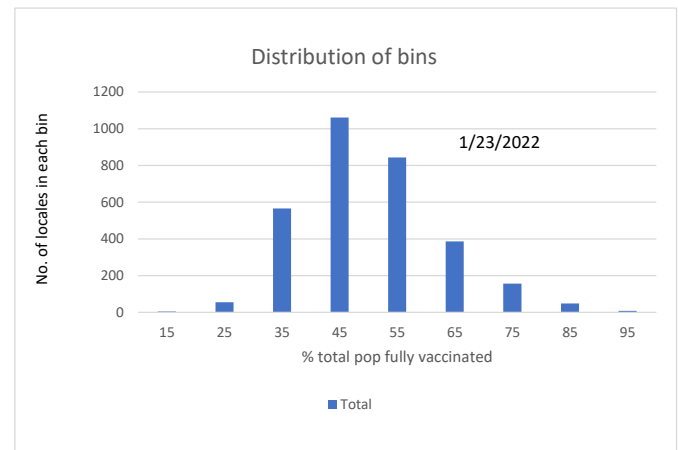
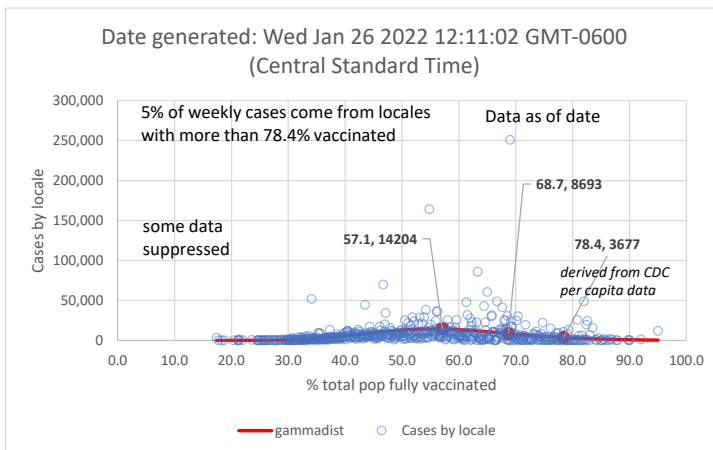
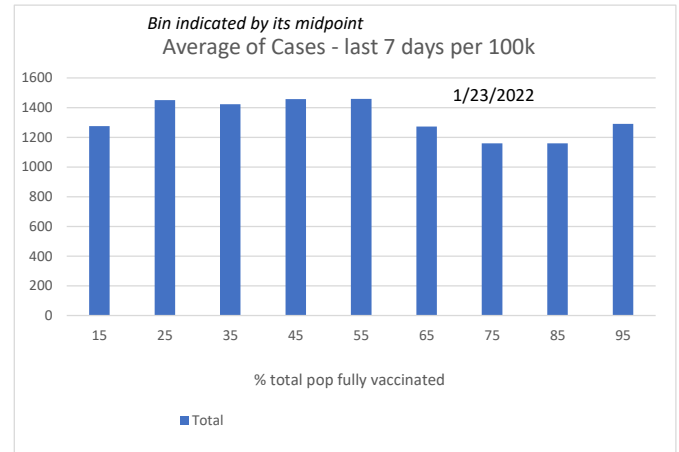
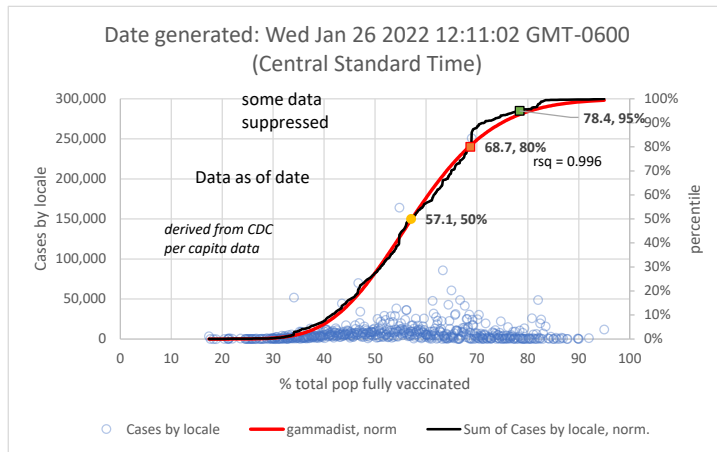
3 weeks	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	34:100,000	34:100,000	-
2022	58:100,000	48:100,000	-
Diff.	25:100,000	14:100,000	11:100,000

3 yr average	859:100,000	56% of All-Cause excess deaths not CV19	Linear Year Projection 275:100,000
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#### Tri-Counties in Texas:



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



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