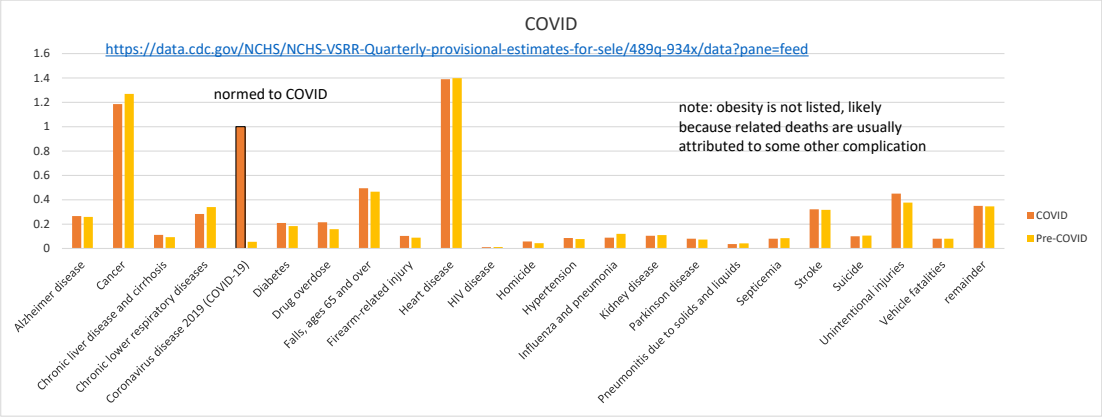
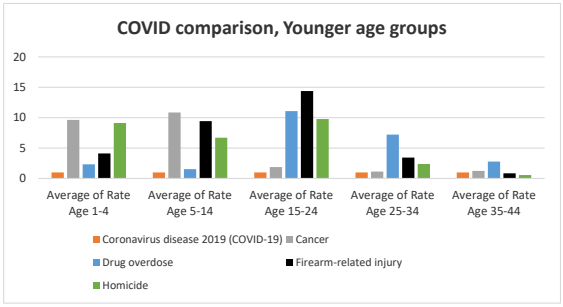
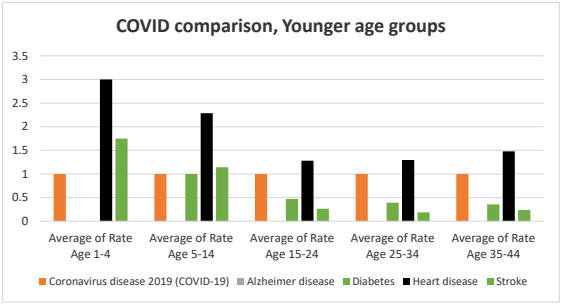
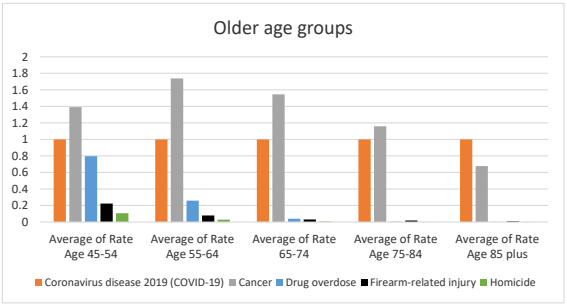
Common causes of death, normalized to COVID. Pre-Covid: 1Q2017 thru 1Q2020, Post-Covid 2Q2020 thru 1Q2021, USA

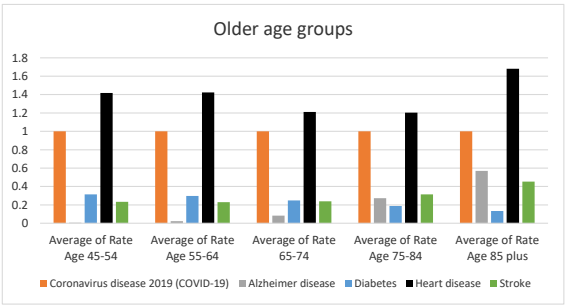


Relative effect of COVID on various age groups, and compared to cause of death. These are all relative to COVID, which is 1.0 on each of four charts, USA

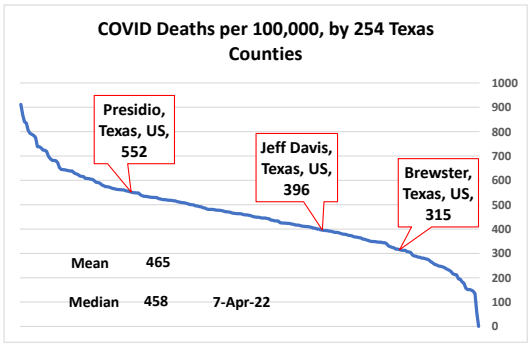


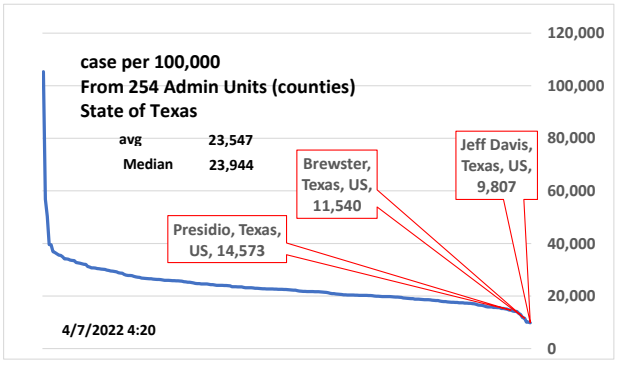


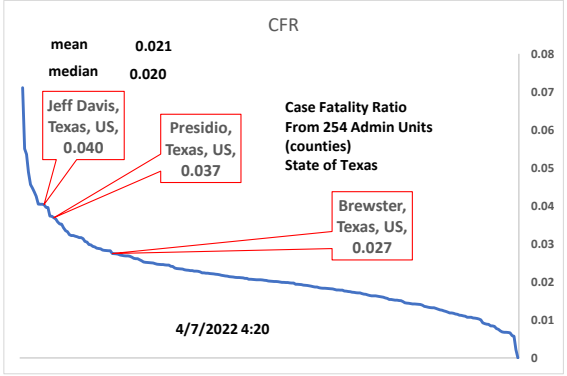




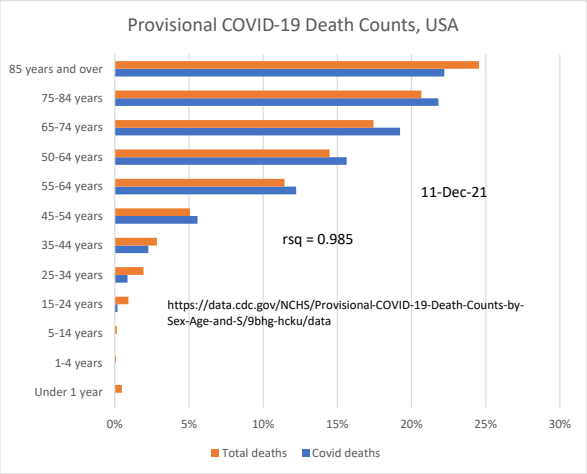
Texas and Tri-county comparisons

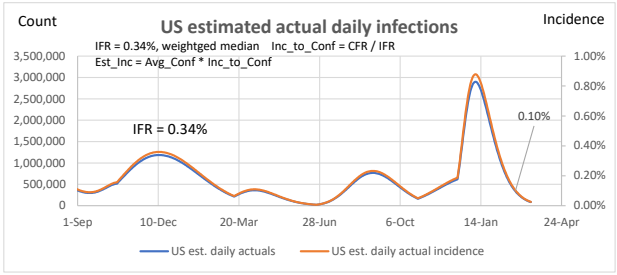






https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data





False Positives Demonstration

Use 0.19% as estimated daily incidence

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

95% accuracy of test

0.19% X 14 = 2.660%

	Positive	Negative	
test pos	2.527%	4.867%	7.39%
test neg	0.133%	92.473%	92.61%
	2.660%	97.340%	100.00%

False pos. is more than half of total positives.

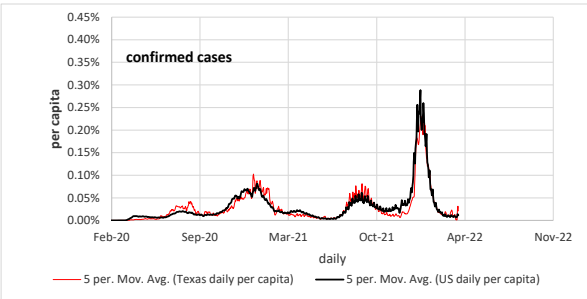
TRUE +	2.527%/7.39%	34.2%
FALSE +	4.867%/7.39%	65.8%
Total	----------	100.00%

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 specifity not necessarily equal.

US vs. Texas



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

29% of All-Cause excess deaths are non-CV19

USA Excess Deaths, 2021 (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	-
2021	1052:100,000	909:100,000	-
Diff.	193:100,000	51:100,000	143:100,000

26% of All-Cause excess deaths are non-CV19

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

Week 14	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	249:100,000	249:100,000	-
2022	296:100,000	249:100,000	-
Diff.	47:100,000	-0.2:100,000	47:100,000

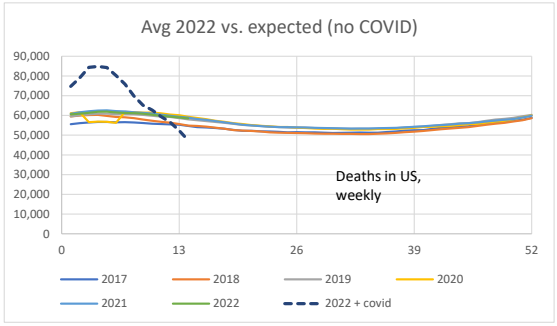
3 yr average
859:100,000

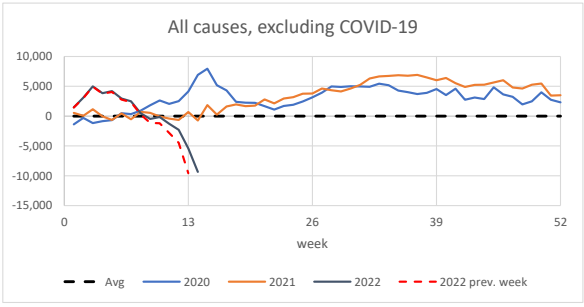
0% of All-Cause excess deaths not CV19

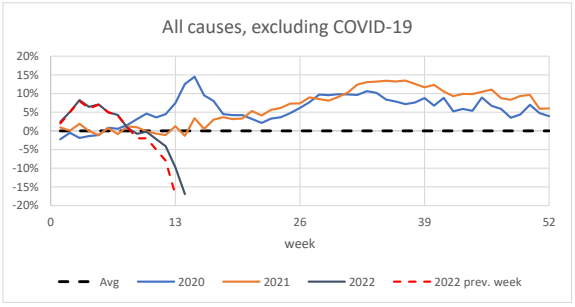
Linear Year Projection 176:100,000

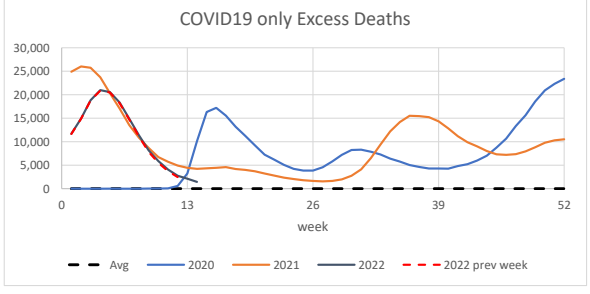
https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data

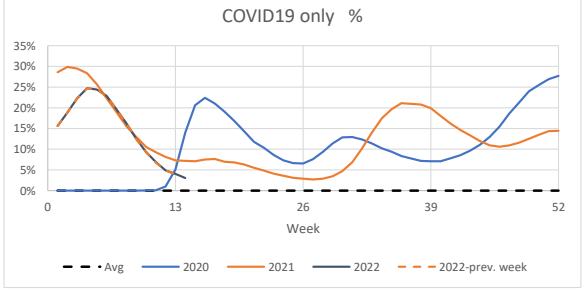
Average and Excess Deaths:





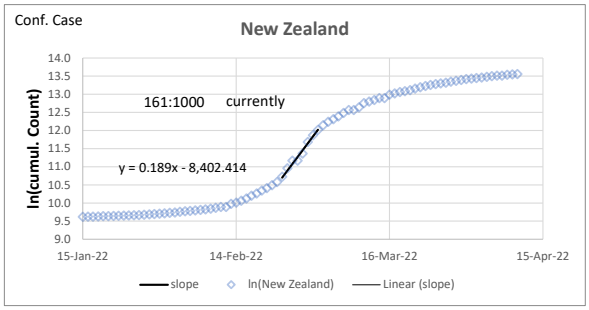


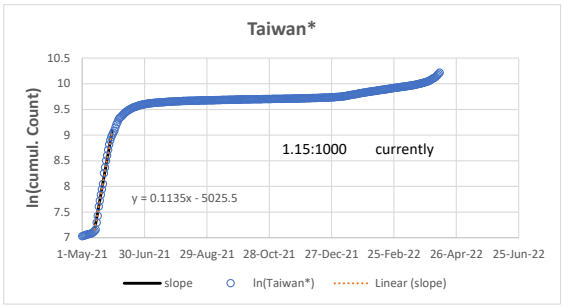


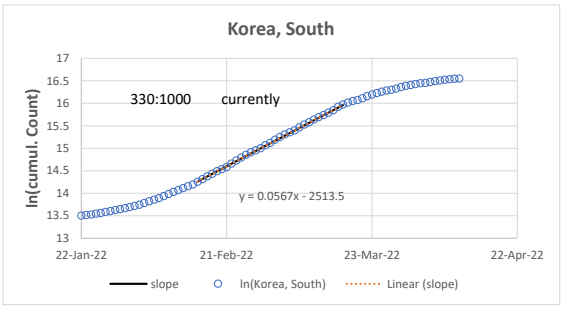


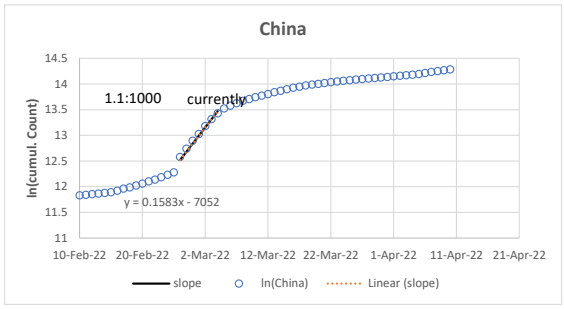
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely underreported. The previous week's data is shown as dashed, to give an idea of the effect of the gradual update.

Recent exponential growth examples:



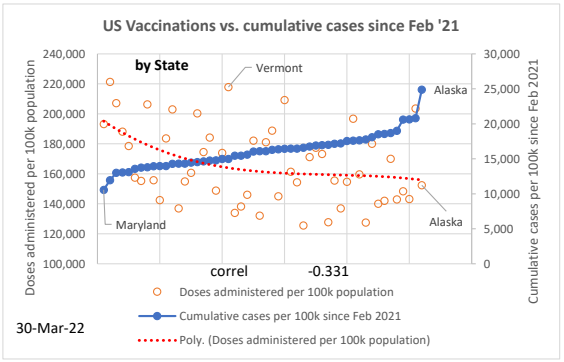


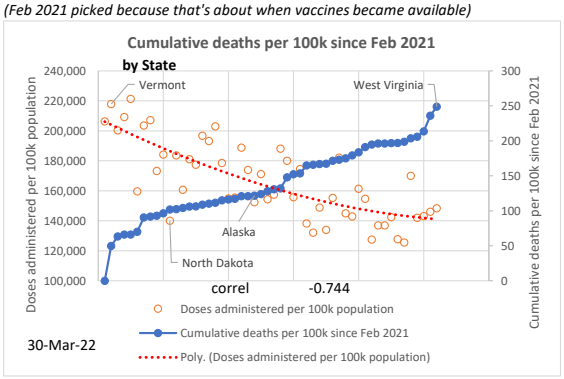




Vaccinations and cumulative outcomes:

(Feb 2021 picked because that's about when vaccines became available)





https://healthdata.gov/api/views/gqxm-d9w9/files/69321a61-c9f9-4fa5-8999-4ba27b172021?download=true&filename=Community%20Profile%20Report%2020220328.xlsx
https://github.com/CSSEGISandData/COVID-19/blob/master/csse_covid_19_data/csse_covid_19_daily_reports_us/03-29-2022.csv