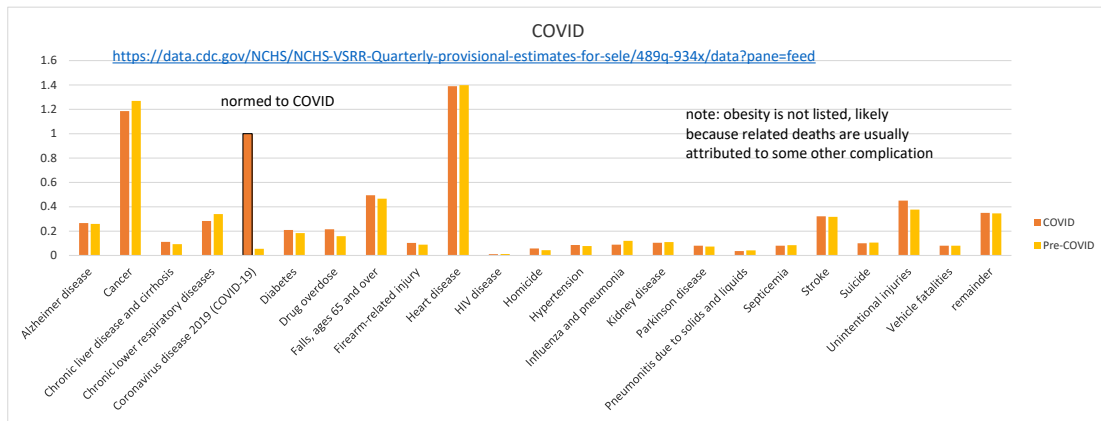
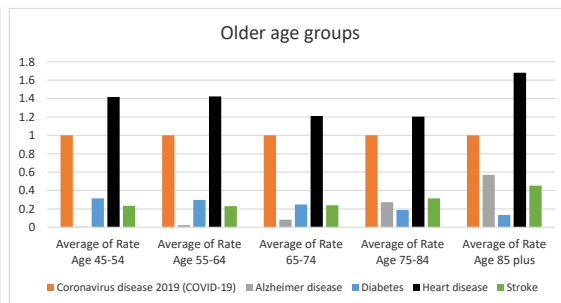
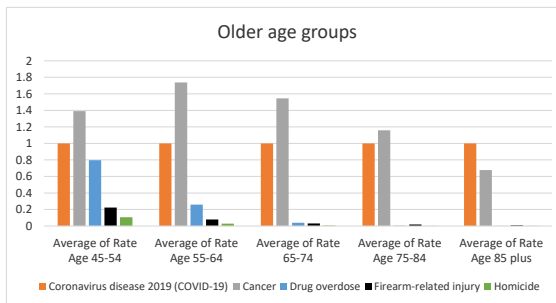
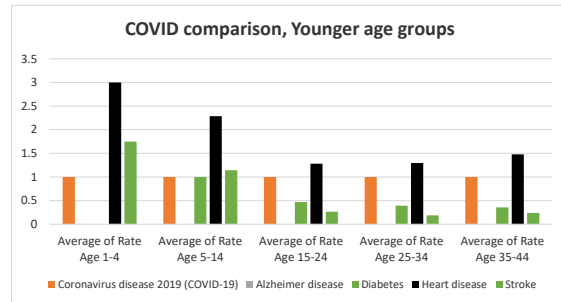
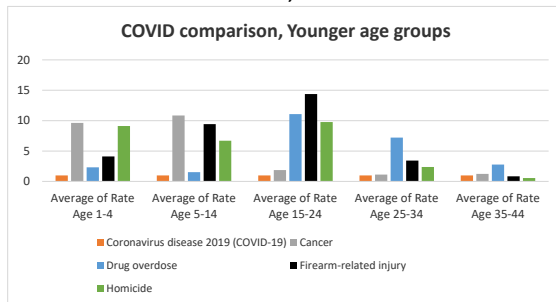


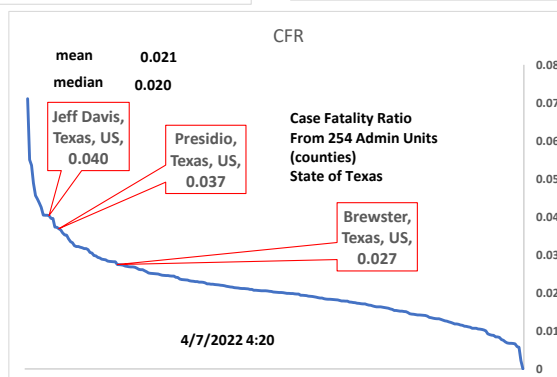
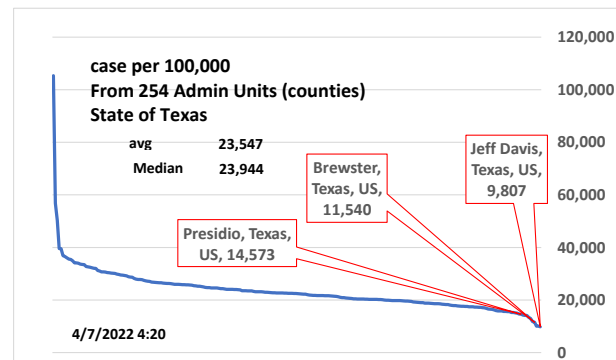
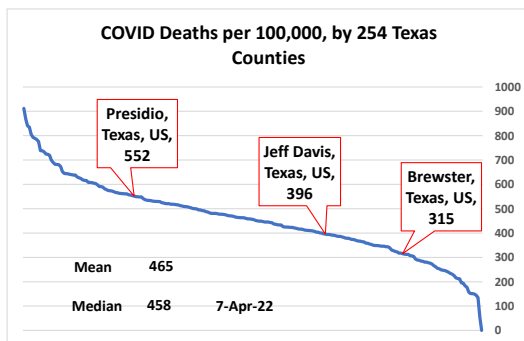
Common causes of death, normalized to COVID. Pre-Covid: 1Q2017 thru 1Q2020, Post-Covid 2Q2020 thru 1Q2021, USA

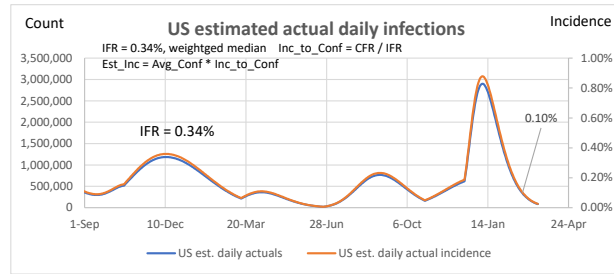
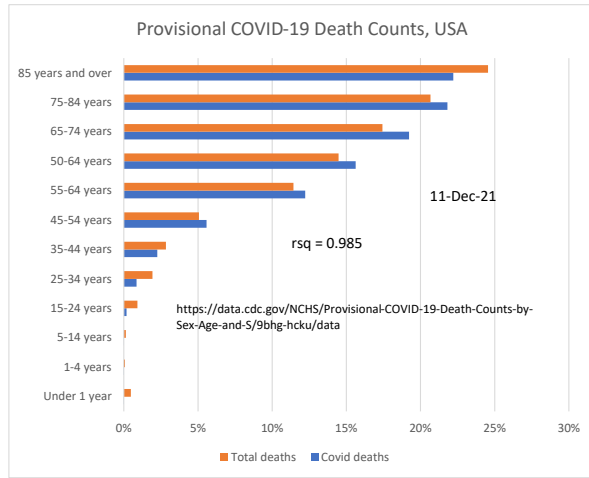


Relative effect of COVID on various age groups, and compared to cause of death. These are all relative to COVID, which is 1.0 on each of four charts, USA



Texas and Tri-county comparisons





#### 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

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

0.19% X 14 = 2.660%

<b>Sensitivity</b>	7.39%
Probability of detection where condition exists	92.61%
True + / (True + & False -)	95%
<b>Specificity</b>	65.8%
Probability of not detecting where condition doesn't exist	100.00%
True - / (True - & False +)	95%

False pos. is more than half of total positives.

TRUE + 2.527%/7.39%

FALSE + 4.867%/7.39%

Total -----

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

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):

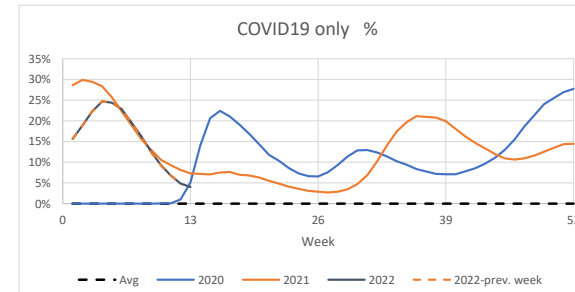
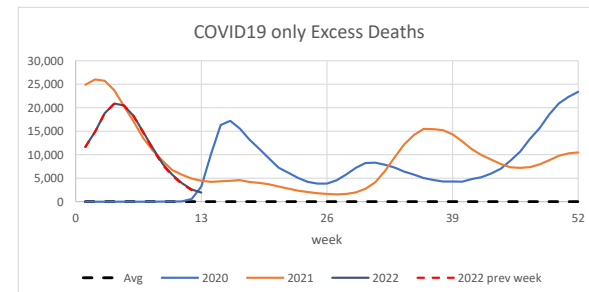
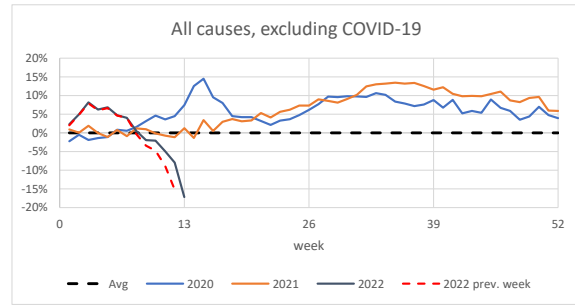
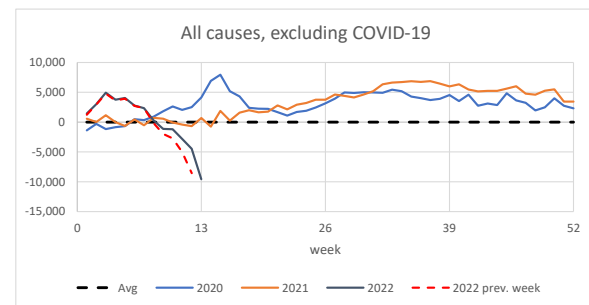
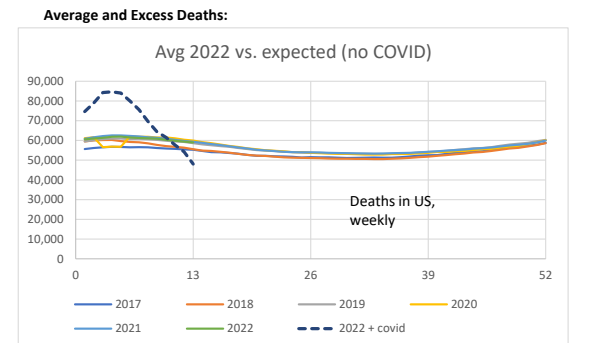
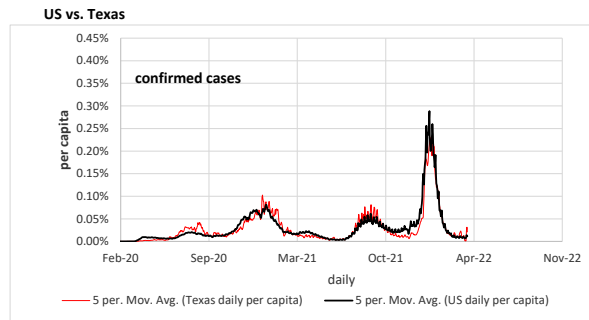
Week 13	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	232:100,000	232:100,000	-
2022	278:100,000	232:100,000	-
Diff.	46:100,000	-0.4:100,000	46:100,000

3 yr average
859:100,000

-1% of All-Cause excess deaths not CV19

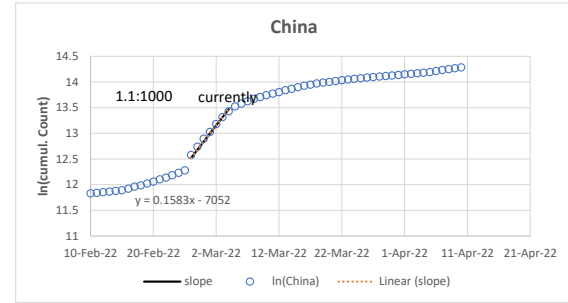
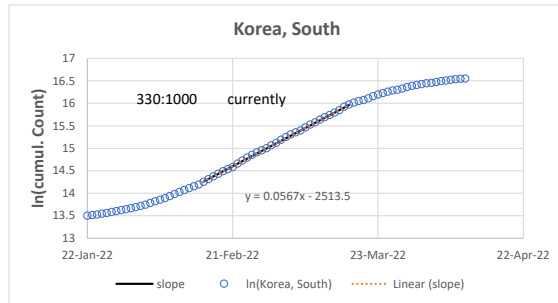
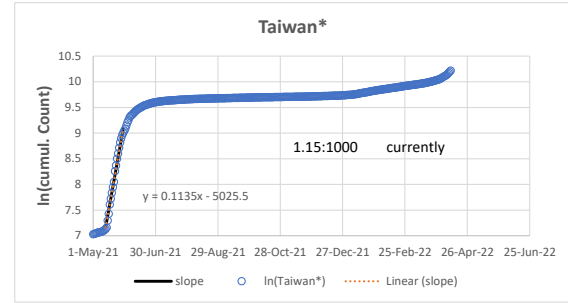
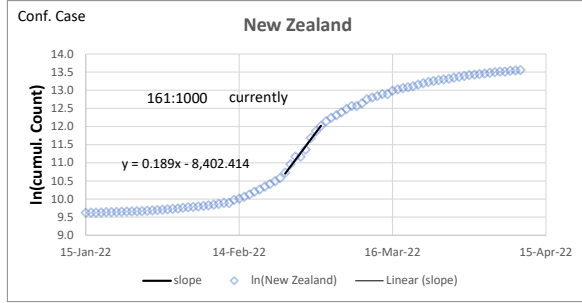
Linear Year Projection 186:100,000

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

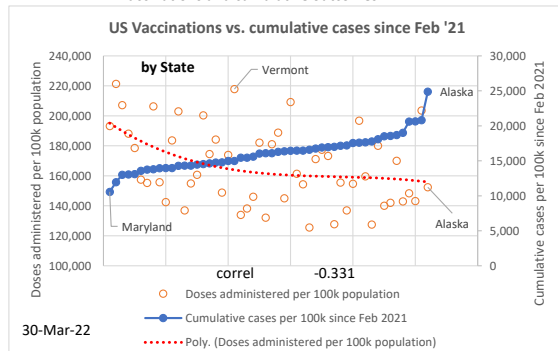


Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely underreported. The previous week's data is shown as dashed, to give an idea of the effect of the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

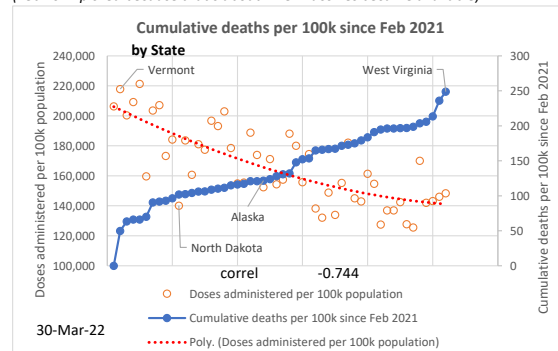
# Recent exponential growth examples:



## 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](https://github.com/CSSEGISandData/COVID-19/blob/master/csse_covid_19_data/csse_covid_19_daily_reports_us/03-29-2022.csv)