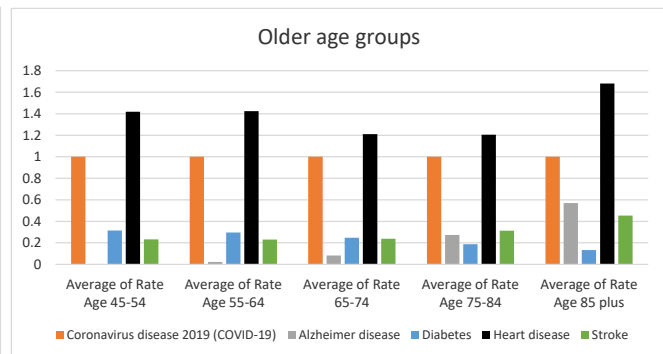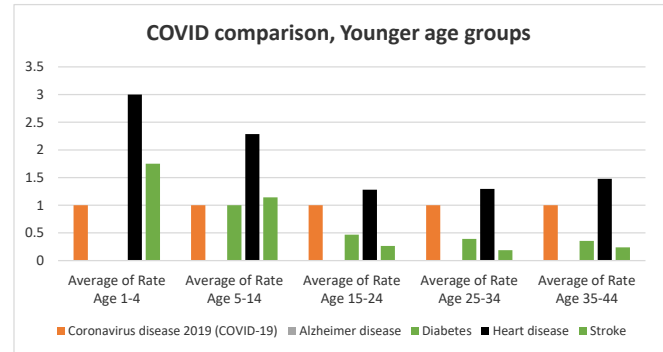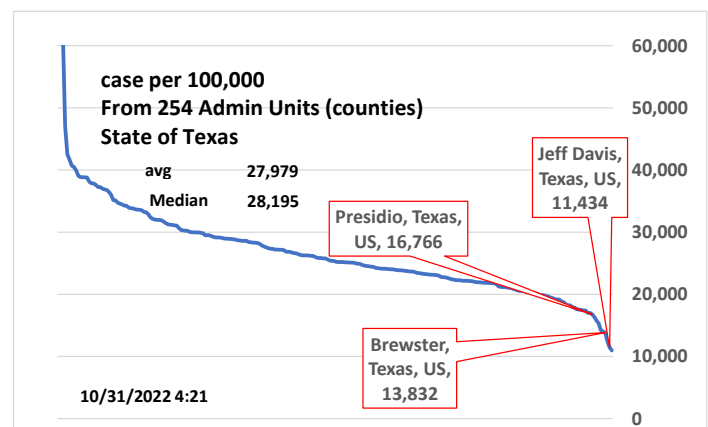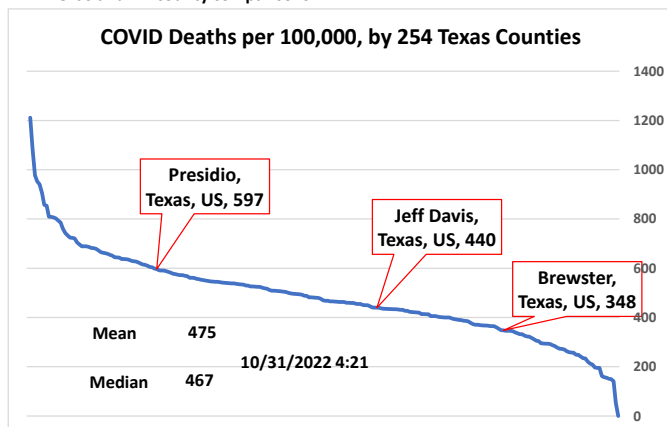Common causes of death, normalized to COVID. Pre-Covid: 1Q2017 thru 1Q2020, Post-Covid 2Q2020 thru 1Q2021, USA

COVID

https://data.cdc.gov/NCHS/NCHS-VSRR-Quarterly-provisional-estimates-for-sele/489q-934x/data?pane=feed

normed to COVID

note: obesity is not listed, likely because related deaths are usually attributed to some other complication
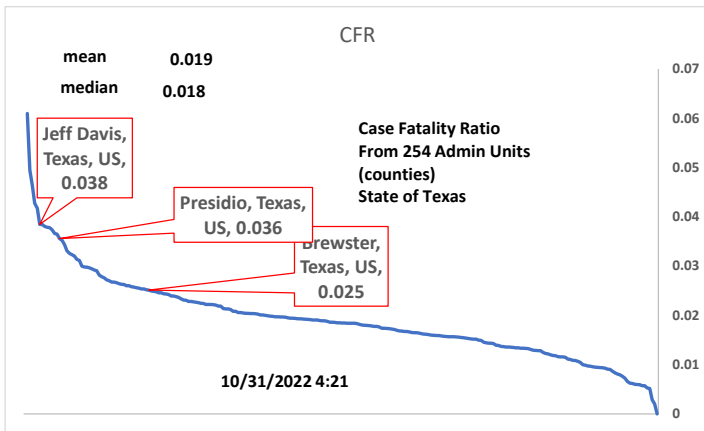
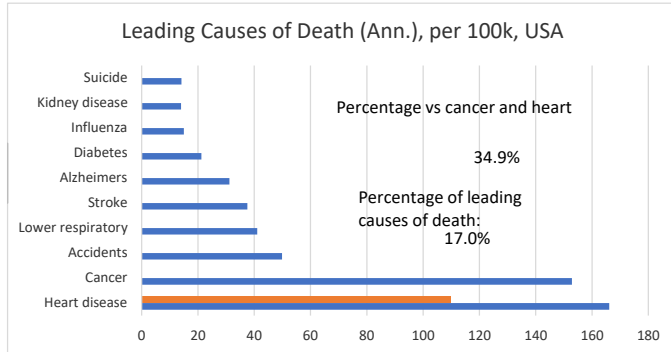Relative effect of COVID on various age groups, and compared to cause of death. These are all relative to COVID, which is 1.0 on each of four charts, USA
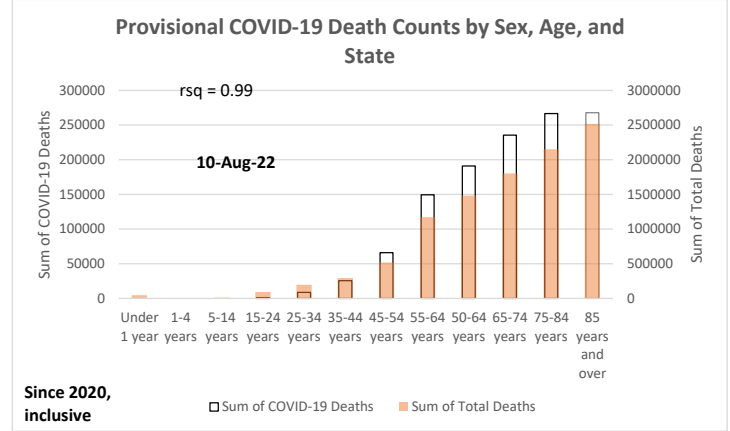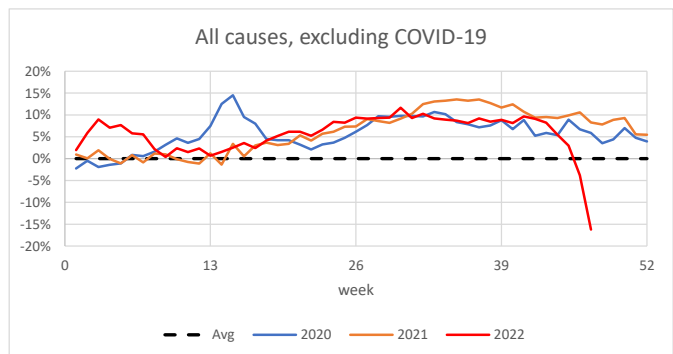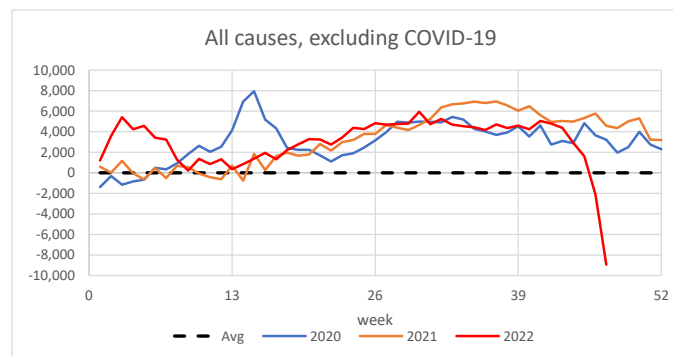

Texas and Tri-county comparisons

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

CFR

mean   0.019
median   0.018

Jeff Davis, Texas, US, 0.038

Presidio, Texas, US, 0.036

Brewster, Texas, US, 0.025

Case Fatality Ratio From 254 Admin Units (counties) State of Texas

10/31/2022 4:21

Provisional COVID-19 Death Counts by Sex, Age, and State

rsq = 0.99

10-Aug-22

Since 2020, inclusive

☐ Sum of COVID-19 Deaths   ■ Sum of Total Deaths

Leading Causes of Death (Ann.), per 100k, USA

Percentage vs cancer and heart

34.9%

Percentage of leading causes of death:

17.0%

	Under 65	Over 65
All	26.0%	74.0%
COVID-19	25.5%	74.5%

Conditions Contributing to COVID-19 Deaths, by State and Age, Provisional 2020-2022
This dataset shows health conditions and contributing causes mentioned in conjunction with deaths involving coronavirus disease 2019 (COVID-19) by age group and jurisdiction of occurrence.
2020-2022 data are provisional.

False Positives Demonstration
Use 0.19% as estimated daily incidence
Prevalence estimated as avg. infected period of 2 weeks X incidence

				0.19% X 14 = 2.660%
95% accuracy of test	Positive	Negative		Sensitivity
test pos	**2.527%**	**4.867%**	7.39%	Probability of detection
test neg	**0.133%**	**92.473%**	92.61%	where condition exists
	2.660%	97.340%	100.00%	**True +** / (**True +** & **False -**)
				95%
False pos. is more than half of total positives.				Specificity
TRUE +	2.527%/7.39%		34.2%	Probability of not detecting where
FALSE +	4.867%/7.39%		65.8%	condition doesn't exist
Total	------------------		100.00%	**True -** / (**True -** & **False +**)
				95%

Example only; sensitivity and specifity not necessarily equal.

Average and Excess Deaths: **19-Nov-22**

Avg 2022 vs. expected (no COVID)

Deaths in US, weekly

— 2017   — 2018   — 2019   — 2020
— 2021   — 2022   --- 2022 + covid

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	50:100,000	143:100,000

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

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

Week 47	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	772:100,000	772:100,000	-
2022	886:100,000	814:100,000	-
Diff.	113:100,000	42:100,000	72:100,000

All causes, excluding COVID-19

week

- - Avg   — 2020   — 2021   — 2022

2022 Linear Year Projection
37% of All-Cause excess deaths not CV19   79:100,000

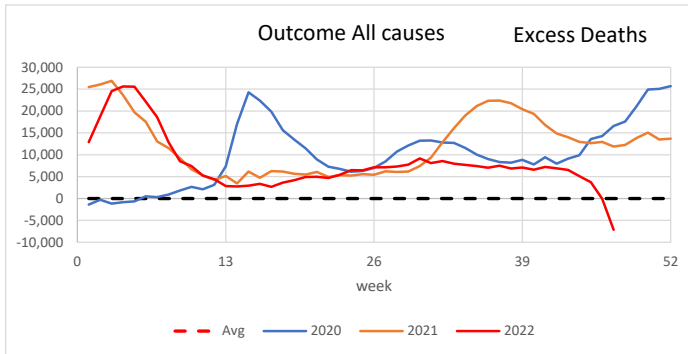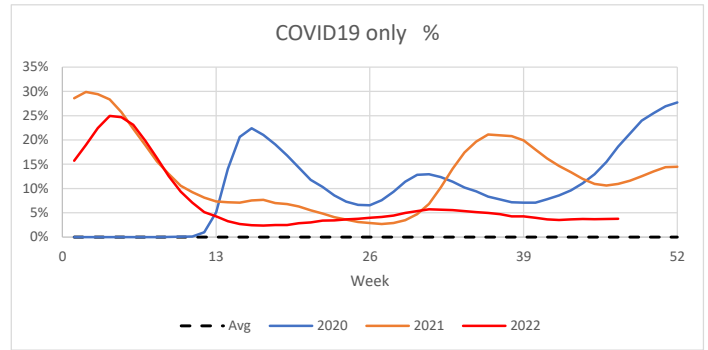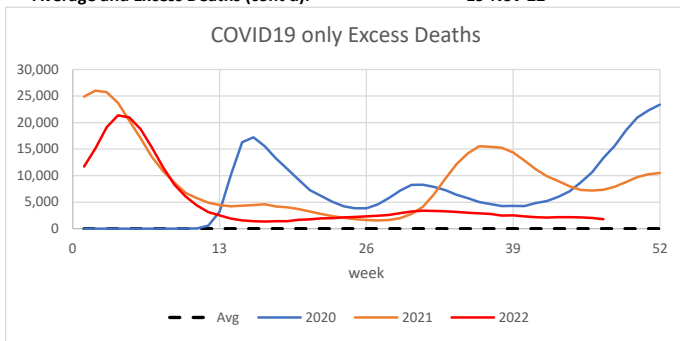|			
Total, latest update	463:100,000	138:100,000	326:100,000
Annualized	162:100,000	48:100,000	114:100,000

30% of All-Cause excess deaths not CV19

All causes, excluding COVID-19

week

— - Avg   — 2020   — 2021   — 2022

COVID19 only Excess Deaths

COVID19 only   %

Outcome All causes   Excess Deaths

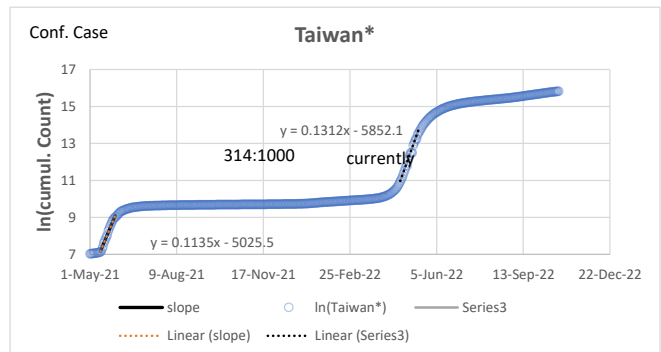## Outcome All causes   Excess Deaths

(CDC started updating this again 02 July 2022)

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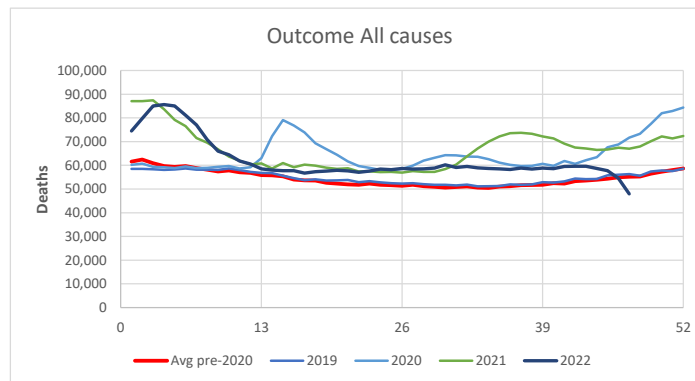
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely underreported.

Recent exponential growth examples:

Conf. Case

New Zealand

403:1000   currently

y = 0.189x - 8,402.414

Conf. Case

Taiwan*

y = 0.1312x - 5852.1

314:1000   currently

y = 0.1135x - 5025.5
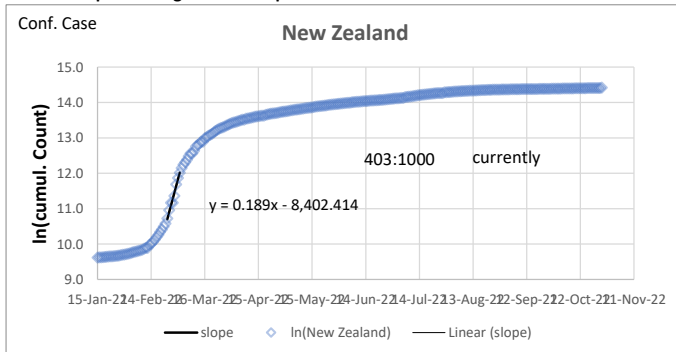
Vaccinations and cumulative outcomes:

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

US Vaccinations vs. cumulative cases since Feb '21

by State

Alaska
Vermont
Oklahoma
Alaska
Maryland

correl   -0.003

○ Doses administered per 100k population
—●— Cumulative cases per 100k since Feb 2021

7-Jun-22

Cumulative deaths per 100k since Feb 2021

by State

Oklahoma
Vermont
North Dakota

correl   -0.719

○ Doses administered per 100k population
—●— Cumulative deaths per 100k since Feb 2021

07 Jun '22

https://healthdata.gov/Health/COVID-19-Community-Profile-Report/gqxm-d9w9
https://github.com/CSSEGISandData/COVID-19/blob/master/csse_covid_19_data/csse_covid_19_daily_reports_us/03-29-2022.csv