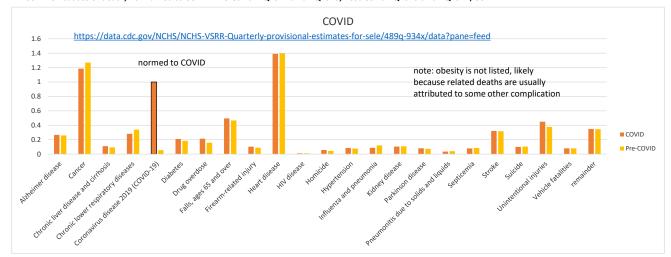
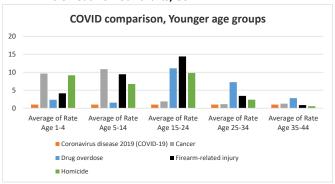
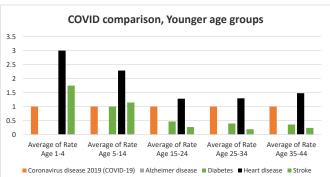
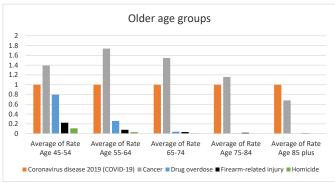
Common causes of death, normalized to COVID. Pre-Covid: 1Q2017 thru 1Q2020, Post-Covid 2Q2020 thru 1Q2021, USA

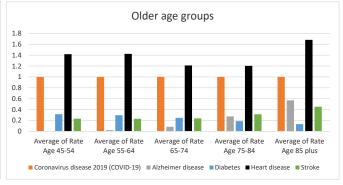


Relative effect of COVID on various age groups, and compared to cause of death. These are all relative to COVID, which is 1.0 on each of four charts, USA

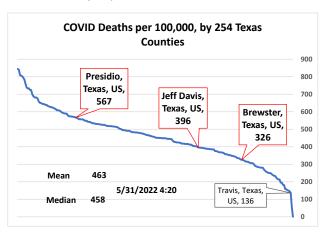


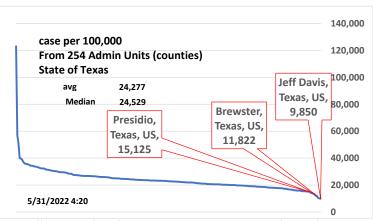




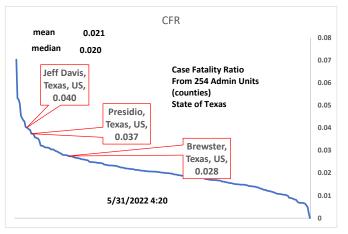


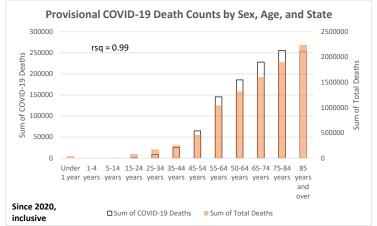
Texas and Tri-county comparisons



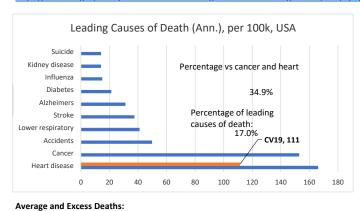


 $\underline{\text{https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data}}$





https://data.cdc.gov/NCHS/Conditions-contributing-to-deaths-involving-corona/hk9y-quqm/data



Avg 2022 vs. expected (no COVID)

26

Deaths in US,

39

52

weekly

2019

--- 2022 + covid

All 26.0% 74.0% COVID-19 25.5% 74.5%

Under 65 Over 65

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

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

95% accuracy of test			0.19% X 14 = 2.660%	
	Positive	Negative		<u>Sensitivity</u>
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%/7.3	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%
		Evample only	ı. concitivity anı	d specifity not peressarily equal

Average and Excess Deaths (cont'd):

2021

13

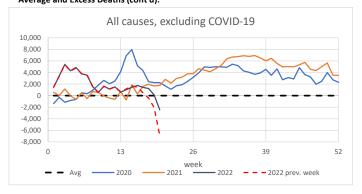
2018

_ 2022

100,000

40.000

20,000



 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

46:100,000

111:100,000

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

USA Excess Deaths, 2021 (from CDC data):

157:100,000

Diff.

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

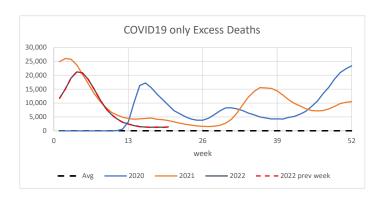
USA Excess Deaths to date (2022, from CDC data):

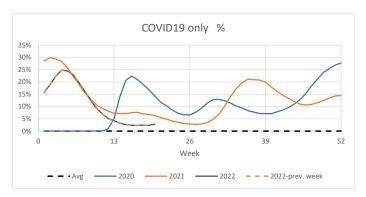
	Week 20	All Cause	All Cause, excl. CV19	CV19
3	yr average before 2020	346:100,000	346:100,000	-
	2022	408:100,000	357:100,000	-
	Diff.	61:100,000	10.6:100,000	51:100,000

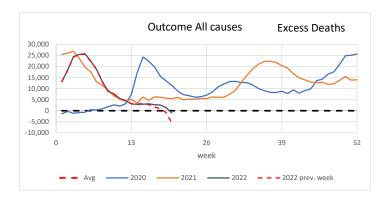
	,		
Diff.	61:100,000	10.6:100,000	51:100,000
3 yr average		Linea	r Year Projection
859:100,000	17% of All-Caus	se excess deaths not CV19	132:100,000

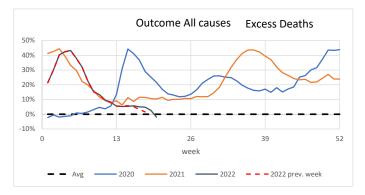
https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data

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	13	26	39	5
0	15	20		



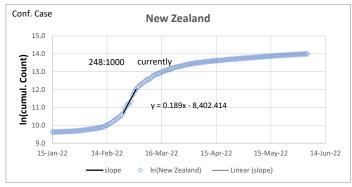


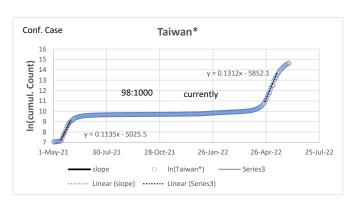


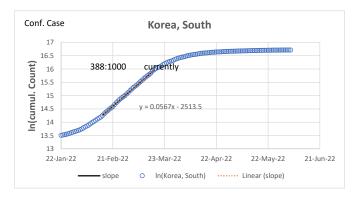


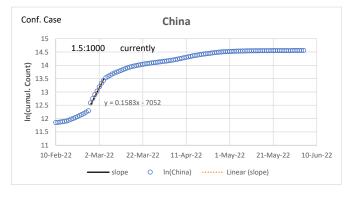
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely underreported. The previous week's data is shown as dashed, to give an idea of the effect of the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

Recent exponential growth examples:

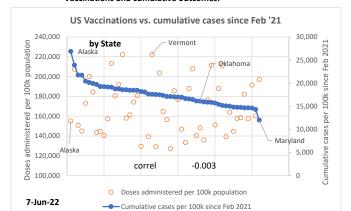




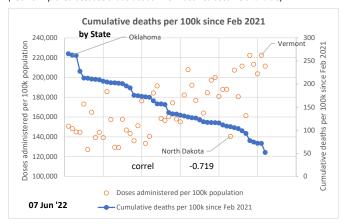




Vaccinations and cumulative outcomes:



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



 $\underline{https://healthdata.gov/Health/COVID-19-Community-Profile-Report/gqxm-d9w9}$

https://github.com/CSSEGISandData/COVID-19/blob/master/csse covid 19 data/csse covid 19 daily reports us/03-29-2022.csv