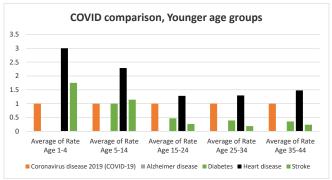
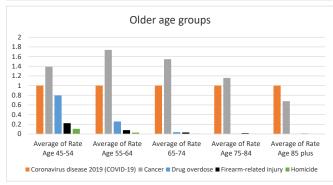
#### Common causes of death, normalized to COVID. Pre-Covid: 1Q2017 thru 1Q2020, Post-Covid 2Q2020 thru 1Q2021, USA



# 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

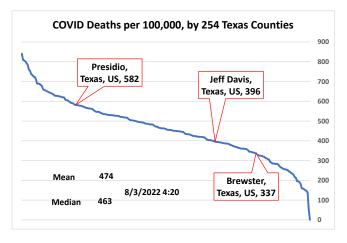


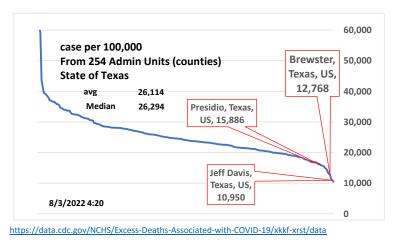


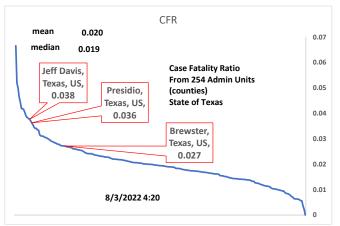


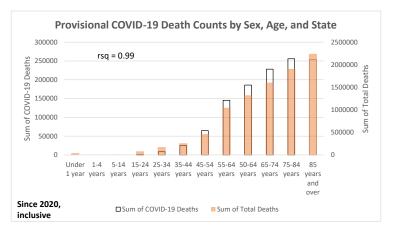


## Texas and Tri-county comparisons

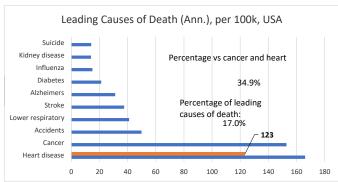








 $\underline{https://data.cdc.gov/NCHS/Conditions-contributing-to-deaths-involving-corona/hk9y-quqm/data}$ 



Over 65

74.0%

74.5%

Under 65

Αl COVID-19 26.0%

25.5%

# 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

#### 95% accuracy of test Positive Negative 7.39% test pos 92.473% 92.61% test neg 2.660% 97.340%

2.527%/7.39%

4.867%/7.39%

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

0.19% X 14 = 2.660% Sensitivity

Probability of detection where condition exists 100.00% True + / (True + & False -) 95%

Specificity

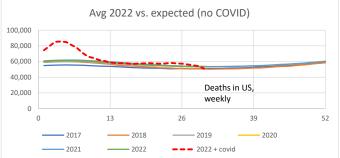
Probability of not detecting where condition doesn't exist True - / (True - & False +)

95%

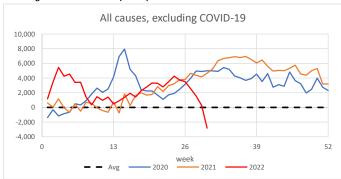
Example only; sensitivity and specifity not necessarily equal.

# **Average and Excess Deaths:**





#### Average and Excess Deaths (cont'd):



# USA Excess Deaths, 2020 (from CDC data):

False pos. is more than half of total positives.

TRUE +

FALSE +

Total

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

34.2%

65.8%

100.00%

### 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):

	COA Excess Deaths to date (2022; Ironi CDC data).			
	Week 30	All Cause	All Cause, excl. CV19	CV19
3	yr average before 2020	503:100,000	503:100,000	-
	2022	581:100,000	523:100,000	-
	Diff.	78:100,000	20:100,000	58:100,000

Linear Year Projection

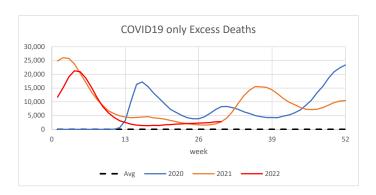
26% of All-Cause excess deaths not CV19

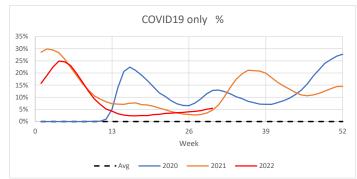
100:100,000

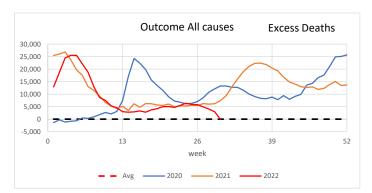
https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data

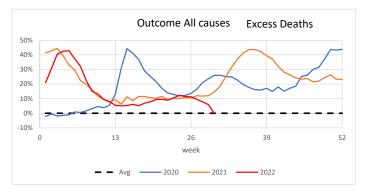
Total, latest update	428:100,000	116:100,000	312:100,000
Annualized	169:100,000	46:100,000	123:100,000

	All causes	, excluding COV	/ID-19		
20%					
15%					
10%				$\overline{}$	
5%			- v \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
0%	<b>₹</b>				
-5%					
-10%					
0	13	26	39	52	
week					
	<b>–</b> Avg	2020 2021	2022		





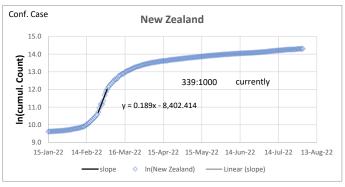


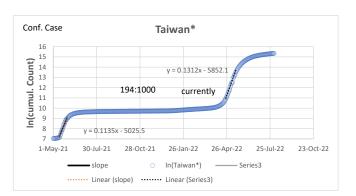


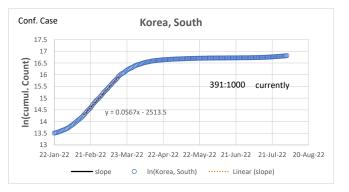
(CDC started updating this again 02 July 2022)

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:







### Vaccinations and cumulative outcomes:



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



https://healthdata.gov/Health/COVID-19-Community-Profile-Report/gaxm-d9w9
https://github.com/CSSEGISandData/COVID-19/blob/master/csse covid 19 daily reports us/03-29-2022.csv