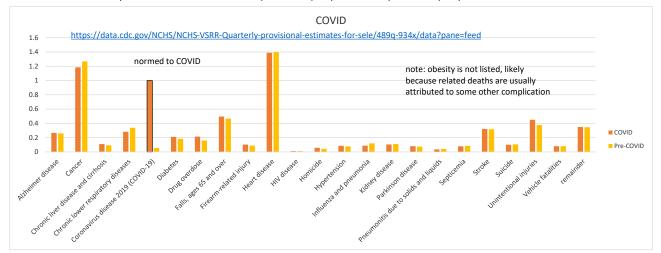
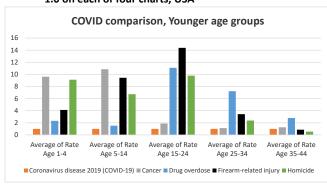
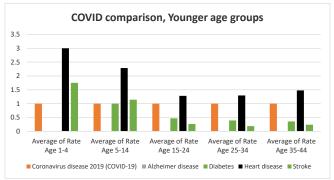
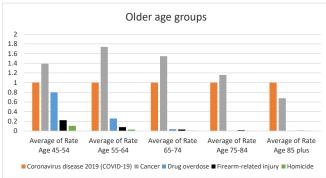
#### Common causes of death, normalized to COVID. Pre-Covid: 1Q2017 thru 1Q2020, Post-Covid 2Q2020 thru 1Q2021, USA

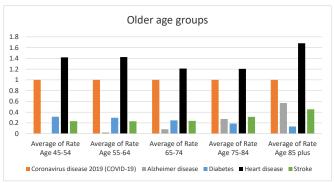


# Relative effect of COVID on various age groups, and compared to cause of death. These are all relative to COVID, which is 1.0 on each of four charts, USA

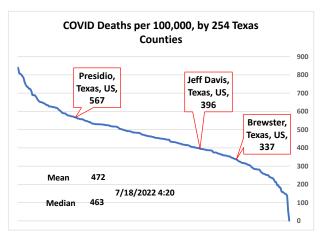


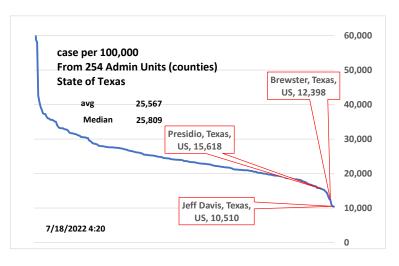


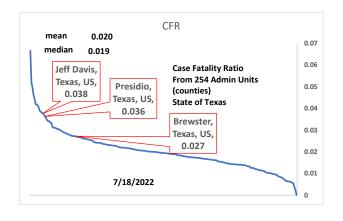


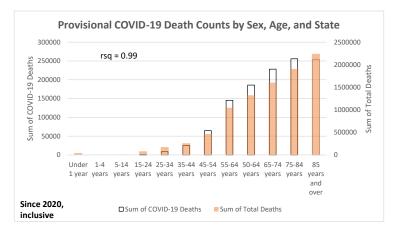


### **Texas and Tri-county comparisons**







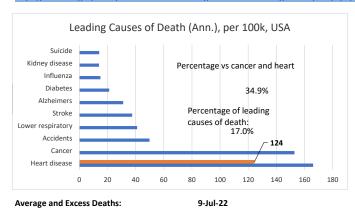


Over 65

74.0%

74.5%

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



# 2020-2022 data are provisional.

Use 0.19% as estimated daily incidence

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.

Under 65

Αl COVID-19 26.0%

25.5%

Avg 2022 vs. expected (no COVID) 100,000 80 000 60,000 40.000 Deaths in US. 20,000 weekly 39 52 13 26 2017 2018 2019 --- 2022 + covid

# False Positives Demonstration

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

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

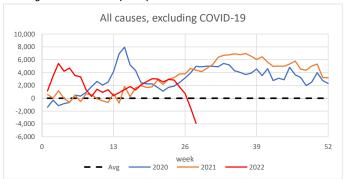
95% accuracy of test

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%

0.19% X 14 = 2.660%

Example only; sensitivity and specifity not necessarily equal.

# Average and Excess Deaths (cont'd):



# All causes, excluding COVID-19 20% 15% 10% 5% 0% -5% -10% 52 13 26 39 week **-** 2020 **----** 2021 **--**

# 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

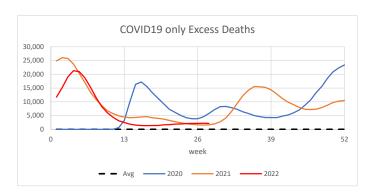
26% of All-Cause excess deaths are non-CV19

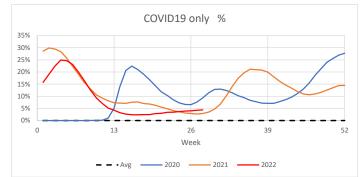
#### USA Excess Deaths to date (2022, from CDC data):

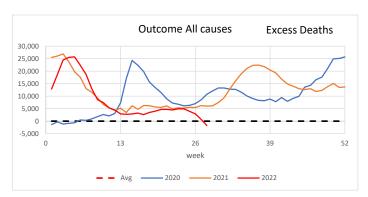
	COA Excess Deaths to date (2022, from CDC data).			
	Week 28	All Cause	All Cause, excl. CV19	CV19
3	yr average before 2020	472:100,000	472:100,000	-
	2022	543:100,000	487:100,000	-
	Diff.	71:100,000	15:100.000	56:100.000

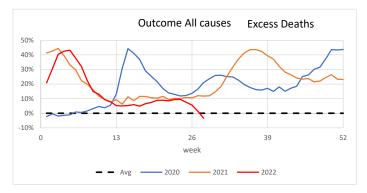
3 yr average		Linear Year Projection		
859:100,000	21% of All-Cause excess deaths not CV19	104:100,000		
https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data				

Total, latest update	422:100,000	111:100,000	310:100,000
Annualized	169:100,000	45:100,000	124:100,000





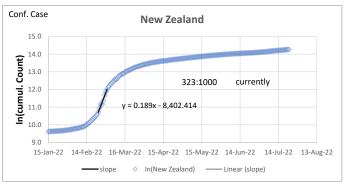


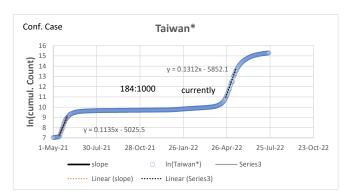


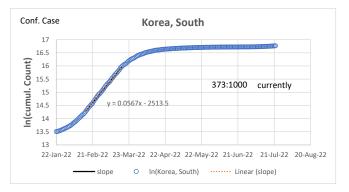
(CDC started updating this again 02 July 2022)

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