#### 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





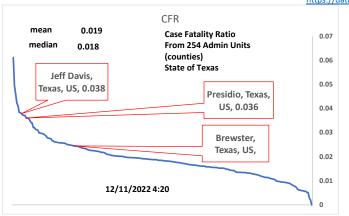




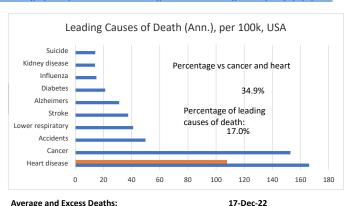
## **Texas and Tri-county comparisons**



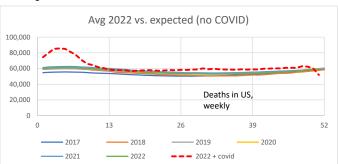


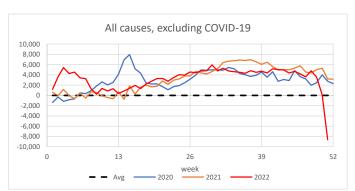


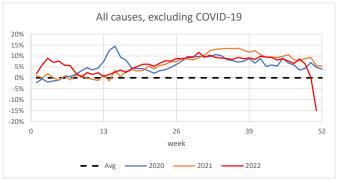
 $\underline{https://data.cdc.gov/NCHS/Conditions-contributing-to-deaths-involving-corona/hk9y-quqm/data}$ 



## **Average and Excess Deaths:**







#### Provisional COVID-19 Death Counts by Sex, Age, and State rsq = 0.993000000 250000 2500000 200000 2000000 10-Aug-22 of COVID-150000 1500000 100000 1000000 50000 500000 Under 1-4 5-14 15-24 25-34 35-44 45-54 55-64 50-64 65-74 75-84 85 1 year years and Since 2020, ☐ Sum of COVID-19 Deaths ☐ Sum of Total Deaths inclusive

	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

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.			<u>Specificity</u>	
TRUE +	2.527%/7.3	39%	34.2%	Probability of not detecting where
FALSE +	4.867%/7.3	39%	65.8%	condition doesn't exist
Total			100.00%	True - / (True - & False +)
				95%

Example only; sensitivity and specifity 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	50:100,000	143:100,000

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

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

	Con Excess Beating to date (2022, from CBC data).				
	Week 51	All Cause	All Cause, excl. CV19	CV19	
3	yr average before 2020	841:100,000	841:100,000	-	
	2022	965:100,000	890:100,000	-	
	Diff.	124:100.000	49:100.000	75:100.000	

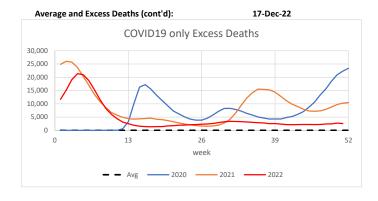
2022 Linear Year Projection

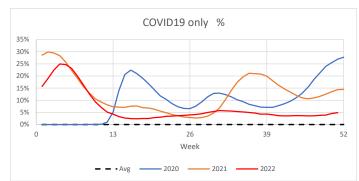
40% of All-Cause excess deaths not CV19

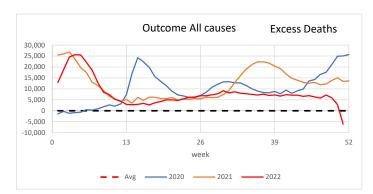
76:100,000

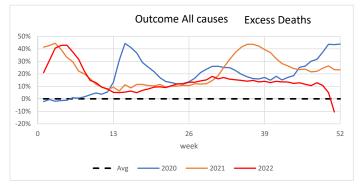
https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data

Total, latest update	474:100,000	145:100,000	329:100,000
Annualized	161:100,000	49:100,000	112:100,000

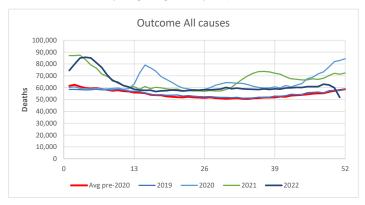






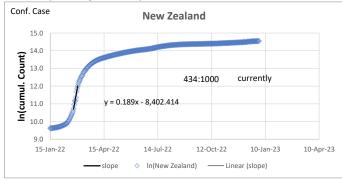


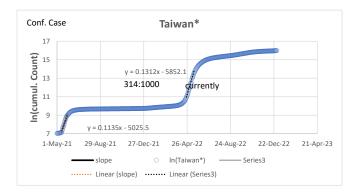
(CDC started updating this again 02 July 2022)



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