#### 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





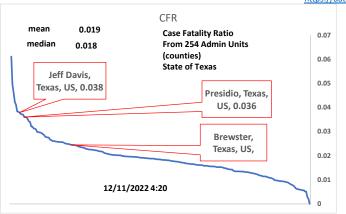




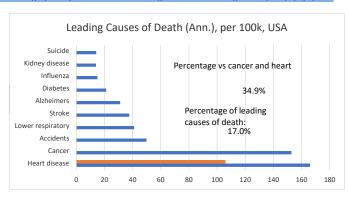
# **Texas and Tri-county comparisons**





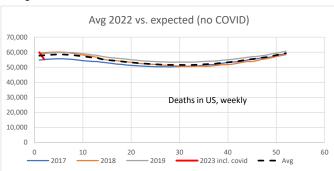


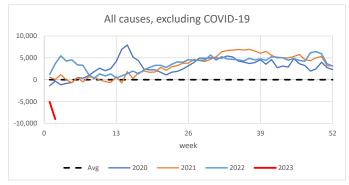
 $\underline{https://data.cdc.gov/NCHS/Conditions-contributing-to-deaths-involving-corona/hk9y-quqm/data}$ 

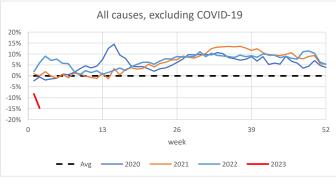


# Average and Excess Deaths:









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		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.

# 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

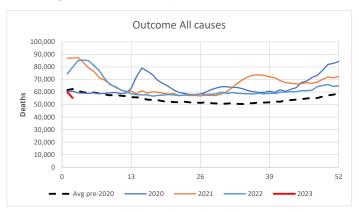
# USA Excess Deaths to date (2022, from CDC data):

All Cause	0	All Cause, excl. CV19	CV19
859:10	00,000	859:100,000	-
992:10	00,000	909:100,000	-
133:10	00,000	57:100,000	76:100,000
	All Cause 859:10 992:10	All Cause 0 859:100,000	All Cause 0 All Cause, excl. CV19 859:100,000 859:100,000 992:100,000 909:100,000

43% of All-Cause excess deaths are non-CV19

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

14-Jan-23



USA Excess Deaths to date (2023, from CDC data):

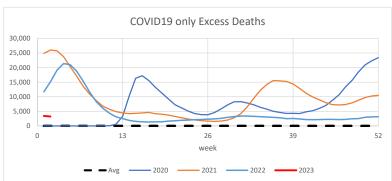
Week 2	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	38:100,000	38:100,000	-
2023	35:100,000	33:100,000	-
Diff.	-3:100,000	-5:100,000	2:100,000

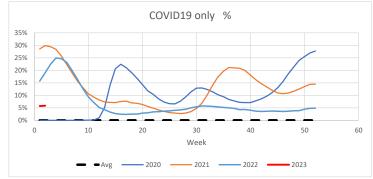
Linear Year Projection 52:100,000

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

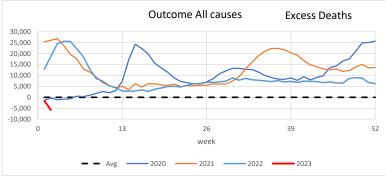
Total, latest update	481:100,000	148:100,000	332:100,000
Annualized	160:100,000	49:100,000	110:100,000

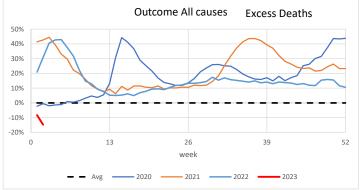
31% 0





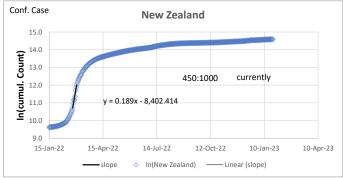
(CDC started updating this again 02 July 2022)

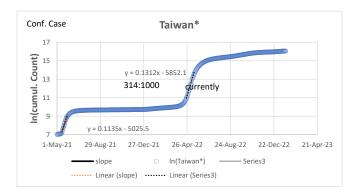




Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely underreported.

## 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