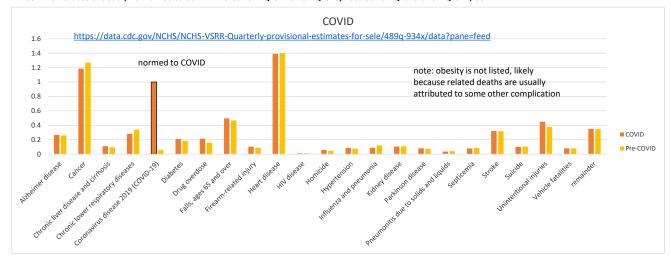
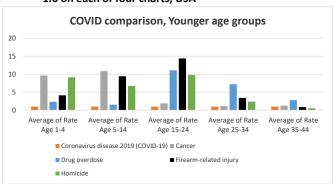
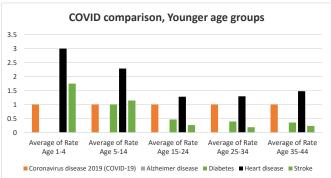
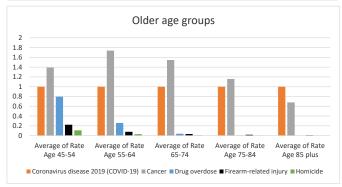
#### Common causes of death, normalized to COVID. Pre-Covid: 1Q2017 thru 1Q2020, Post-Covid 2Q2020 thru 1Q2021, USA

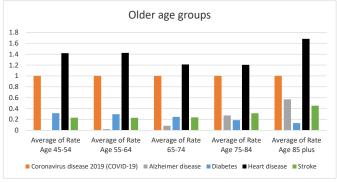


# Relative effect of COVID on various age groups, and compared to cause of death. These are all relative to COVID, which is 1.0 on each of four charts, USA

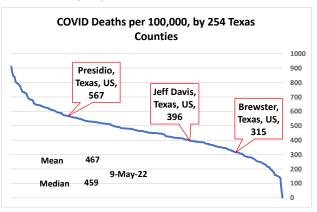


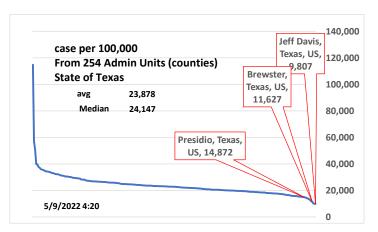


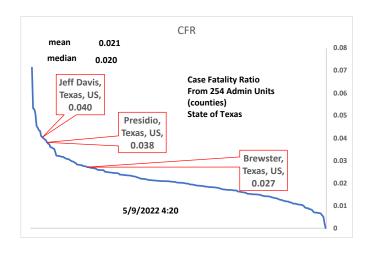


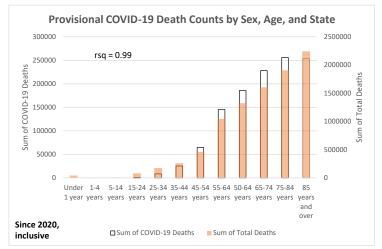


#### **Texas and Tri-county comparisons**



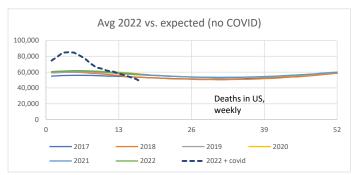






https://data.cdc.gov/NCHS/Conditions-contributing-to-deaths-involving-corona/hk9y-quqm/data

#### Average and Excess Deaths:



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

#### Conditions Contributing to COVID-19 Deaths, by State and Age, Provisional 2020-2022

Under 65 Over 65

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

 Positive
 Negative

 test pos
 2.527%
 4.867%
 7.39%

 test neg
 0.133%
 92.473%
 92.61%

95% accuracy of test

 0.133%
 92.473%
 92.61%

 2.660%
 97.340%
 100.00%

0.19% X 14 = 2.660%

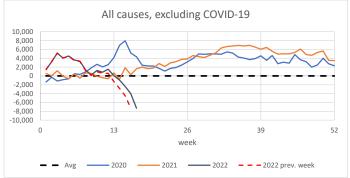
Sensitivity
Probability of detection
where condition exists
True + / (True + & False -)
95%

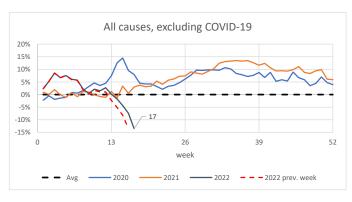
95%
Specificity
Probability of not detecting where condition doesn't exist
True - / (True - & False +)

95%

 ${\it Example only; sensitivity and specifity not necessarily } \overline{\it equal.}$ 

# Average and Excess Deaths (cont'd):





# 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):

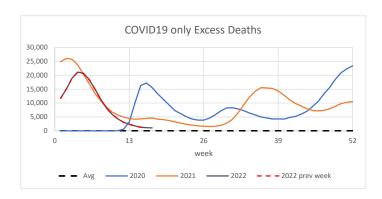
Annualized on 52 weeks			
	All Cause	All Cause, excl. CV19	CV19
3 yr average before 2020	859:100,000	859:100,000	-
2021	1052:100,000	909:100,000	-
Diff.	193:100,000	51:100,000	143:100,000

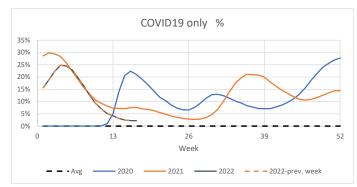
26% of All-Cause excess deaths are non-CV19

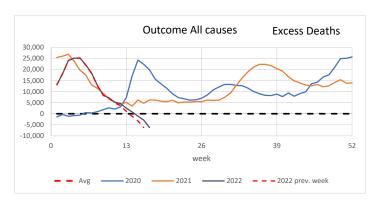
## USA Excess Deaths to date (2022, from CDC data):

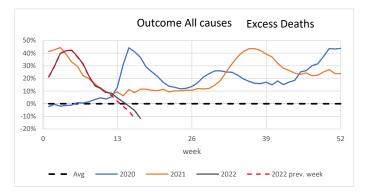
	CSA Excess Deaths to date (2022, from CDC data).					
	Week 17	All Cause	All Cause, excl. CV19	CV19		
3	yr average before 2020	298:100,000	298:100,000	-		
	2022	351:100,000	302:100,000	-		
	Diff.	52:100,000	3.3:100,000	49:100,000		

3 yr average Linear Year Projection 859:100,000 6% of All-Cause excess deaths not CV19 150:100,000 https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/data



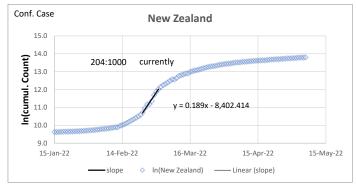


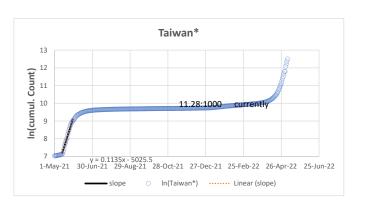


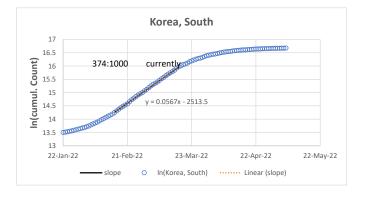


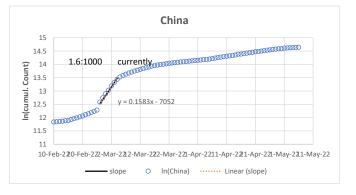
Data in recent weeks are incomplete. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction. Data are not weighted and counts are likely underreported. The previous week's data is shown as dashed, to give an idea of the effect of the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

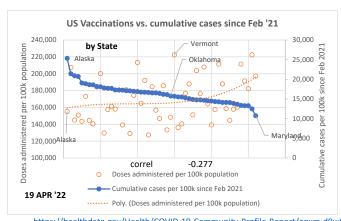
# Recent exponential growth examples:

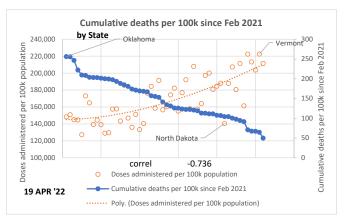












https://healthdata.gov/Health/COVID-19-Community-Profile-Report/gqxm-d9w9 https://github.com/CSSEGISandData/COVID-19/blob/master/csse\_covid\_19\_data/csse\_covid\_19\_dat