

Do the math! 'Died with COVID-19' means 'died from COVID-19'

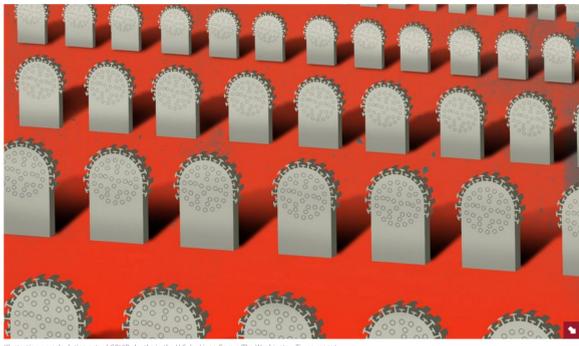


Illustration on calculating actual COVID deaths in the U.S. By Lucas Gargery/The Washington Times more



By David A. Burton - Sunday, December 27, 2020

ANALYSIS/OPINION:

Some people think that the number of COVID-19 deaths has been greatly exaggerated by the mistaken inclusion of people who died from other causes, while coincidentally infected by COVID. They're wrong.

It is true that some people "with COVID-19" (who test positive), die from other causes, and some of those deaths could be mistakenly attributed to COVID-19. But it is simple to prove, with a bit of arithmetic, that such cases are a small percentage of the total reported COVID-19 deaths.

In normal times, the U.S. records an average of about 230,000 deaths per month, from a population of about 332 million. $230K/332M = 0.07\%$ of the nation's population. In other words, an average U.S. resident already has about a 0.07% chance of dying within the next month, without a COVID-19 diagnosis.

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So, how does that compare to his chance of dying within the next month with a COVID-19 diagnosis?

Let's calculate that. Here are the latest U.S. figures (as of Dec. 23): 18,687,330 known cases, 330,841 deaths and 10,948,136 recoveries.

So the number of deaths as a percentage of known resolved cases (Case Fatality Rate, or "CFR") is $330,841 / (10,948,136 + 330,841 \text{ deaths}) = 2.9\%$.

(Aside: It is likely that as many as half of all recoveries were mild cases which went undetected, so the true infection fatality rate ["IFR"] might be as little as half the calculated CFR, i.e., it might be as low as 1.5%. But that does not affect these calculations, and it is still more than 10 times as deadly as typical seasonal flu.)

Another way to estimate the CFR is just from recent cases, by comparing the average daily death rate (2736 per day, calculated over the week of Dec. 15-21) to the average daily number of new known cases (212,990 per day calculated over the preceding one to two weeks). $2736 / 212,990 = 1.3\%$. (The good news is that the CFR is declining, but the bad news is that it's still much worse than typical seasonal flu.)

About 88% of COVID-19 deaths occur within 28 days of diagnosis. So, multiplying the CFR by 0.88 yields the percentage of people who have a positive Covid diagnosis, who can be expected to die from COVID-19 within the next 28 days: That's 2.6% averaged over the entire epidemic, or 1.1% averaged over a single recent week.

Dividing 0.07% by 1.1% = 6.4%. In other words, if you have a positive COVID-19 diagnosis, you're 16 times more likely to die from COVID-19 in the next month than to die from something else.

Most coroners and medical examiners are competent, and so official causes of death are correct more often than not. But even if every case in which someone "with COVID-19" who died from a different cause were misattributed to COVID-19, it still would have only a small effect on the COVID-19 death statistics.

So, if someone tells you that the number of reported COVID-19 deaths is greatly exaggerated, due to misattributions of people who test positive for COVID-19, but who actually died from a different cause, they are wrong. They need to "do the math!"

David A. Burton is a computer scientist in Cary, N.C. References for the statistics cited in this article can be found on his website, sealevel.info.

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Kavaller 3 hours ago
A great set of numbers, but look at normal death rate due to lung diseases and other causes of death to include the flu, it appears to the average person they are no longer reported, so Covid reported deaths on its own (no other contributor) seems to be inflated artificially for fear impact, also how come the largest killer of people in the US is not done to differentiate between Covid and the biggest killers on a daily basis? Covid deaths are a distant third place even with inflated numbers if you depicted it that way

SavvyElrod 54 minutes ago
Mumbo jumbo... all that math is completely unnecessary, the USA has been having 2.8 plus million total deaths per year for the last 3 years. It increases each year by 15 to 50 thousand. Without covid in 2020 we should have had very close to 3 million total deaths. According to todays CDC site 332,705 people have died from covid 19 in 2020. At this rate we should be safe using a figure of 350,000 covid deaths in the USA for 2020. A practical estimate of total deaths caused by covid will be the actual number that exceeds 3 million total reported deaths. Heck, I do not know if there is actually 350,000 extra covid deaths, seems like nobody does. I look at my state of Alaska and I can not find A big difference in total deaths from 2019 to 2020. Time will tell, seems like everyone would benefit if the numbers and information was easily available to all people

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