

Rethinking COVID-19 Mortality Statistics



By *Chuck Dinerstein, MD, MBA and Charles Geshekter, Ph.D.* — May 27, 2020

Throughout the coronavirus crisis, the co-authors of this article have often held opposite viewpoints on many aspects of the issue. Despite coming from different disciplines with competing perspectives, they join forces to address puzzling questions about coronavirus mortality statistics.



Image courtesy of RitaE on Pixabay [1]

“Statistics may be used to convert complicated social problems into more easily understood estimates, percentages and rates.” Joel Best [1]

Introduction

The science of collecting and analyzing numerical data is fundamental to understanding social phenomena. In the Coronavirus Era, researchers, physicians, administrators, and funding agencies aim to seek a consensus about the origins, pathogenic effects, effective treatments, and containment measures regarding a novel coronavirus – all of which require data predicated on morbidity and mortality statistics. Careful attention to the data is critical for understanding mortality figures while remaining mindful of the flaws and limitations attendant with any statistics. ?

Epidemics have complex causes from interacting with environmental factors. In our data-saturated world, now more than ever, we need to maintain a realistic sense of risks to our safety and health. Over the past six months, the CDC statistics and Johns Hopkins University tables have been used

to convert complex health issues surrounding COVID-19 into better-understood numbers about death estimates and cases. Understanding may become distorted when numbers replace clear definitions. Numbers are not facts and should not be considered indisputable. The conscious choice of what figures to count or weigh does and should not convey precision or infallibility.

Descriptive statistics based on clear definitions must be accurate enough to arouse and mitigate concerns in a new epidemic. Statistical analysis warrants skepticism, diverse perspectives, and common sense. Vigorous debates over the accuracy or meaning of COVID-19 numbers should ultimately help to better explain medical and scientific truths.

COVID-19 Statistics

There are two fundamental points often ignored when referring to “the death toll from COVID-19.”

- There is no evidence or proof offered by any scientist, pathologist, or virologist that confirms COVID-19 as the “cause” of death in the certification process.
- An expanded definition of a “COVID-19 death” was enacted by the CDC on March 24th, to include probable cases. This conflates and clusters test results creating a source of both under and overestimation. “COVID-19 deaths are identified using a new ICD-10 code. When COVID-19 is reported as a cause of death or when it is listed as a ‘probable’ or ‘presumed’ cause, it is coded as U07.1 *This can include cases with or without laboratory confirmation.*” [emphasis added]

All deaths of patients with a linkage to COVID-19 are now classified as “COVID-19 deaths regardless of cause or *underlying health issues that could have contributed to loss of life.*” - Dr. Deborah Birx

Today, deaths from coronary disease, diabetes, morbid obesity, or pneumonia may be *linked* or *connected* to a COVID-19 positive test result. The operative words “linked” or “connected” provide little explanation of how they’re related or indicate what the presumed link entails. As the Wall Street Journal [noted](#), ^[2] “tabulating deaths is tricky. Some states count probable deaths for cases where there weren’t test results available, but where the deceased had symptoms of the disease.”

Annual reports from the CDC/NIH confirm that Americans continue to die from the same top ten common causes. The leading causes of death are coronaries, cancers, accidents, lower respiratory diseases, stroke, diabetes, and Alzheimer’s. The mortality numbers remain consistently around 2.8 million per annum.

Our essay suggests a snapshot in time for Coronavirus deaths. For this investigation, we accept the CDC’s data from January 1st to May 5th as the standard, providing a date at which to engage the statistics, without future projections or shifting definitions.

Annual Mortality Statistics

Tracking mortality statistics for COVID-19 involves a moving target of guesses, projections, and revised definitions. Amidst an avalanche of expanding statistics, we need to put American deaths into perspective. On average, 7,700 deaths occur every day from all causes in the U.S. That amounts to 2.8 million deaths per annum. With no available data for 2019, the National Vital

Statistics Survey (NVSS) [estimates](#) [3] there were 25,000 more deaths in 2018 than in 2017, a statistically insignificant amount. The death rate in America stands consistently at 0.8% annually.

To make broad estimates, the CDC uses statistical models which it periodically revises. From 2013-2018, the CDC claims influenza annually caused 57,000 deaths [2] and sickened 42 million Americans. Fatal complications from the flu may include pneumonia, stroke, and heart attack. While the impact of the flu varies, the CDC estimates that influenza results in between 9 million and 49 million cases of illness and between 12,00 to 79,000 annual deaths per year. This enormous range is not unusual with CDC statistics, because not all flu cases are ever reported, and flu is not always listed on death certificates.

In its annual mortality tabulations, the CDC combines influenza and pneumonia into a single category. This category typically averages between 51,000 and 56,000 fatalities, making it the 8th leading cause of death per year from 2013-2017. An estimated 80,000 Americans died of influenza and its complications in the winter of 2018, the highest death toll in 40 years. But counting influenza cases is problematic.

The CDC was “not sure of the exact numbers because flu is not a reportable disease in most parts of the United States.” (www.hopkinsmedicine.org [4].) Furthermore, influenza/pneumonia record-keeping is affected by the fluid dates that define the “flu season.” That may fluctuate from October to May or from December through February, depending on the year. For instance, the CDC estimates that “between October 1st, 2019, to April 4th, 2020, about 24,00 to 62,000 people died of influenza.”

The CDC indicates that for 2020 up to May 5th, (or 35% of the year), there have been 751,953 deaths from all causes (roughly 95-97% of the expected tally). Influenza deaths accounted for .07% of all deaths, a number consistent for every year from 2013 to 2018.

The CDC's ***Provisional Death Count for COVID-19*** (May 5, 2020), lists 5,910 influenza deaths; 39,910 COVID-19 deaths; 67,372 pneumonia deaths; and 17,683 deaths from pneumonia+COVID-19. The remarkably high spike seems to have occurred due primarily to the roughly 56,000 deaths for this period, 0.07 percent of all U.S. deaths to May 5th, 2020.

The standard definition of an emerging disease like COVID-19 appears surprisingly loose. A cluster of characteristic symptoms (flu-like, common cold-like, pneumonia-like), possible contact with a previous patient, and a test result of uncertain accuracy are all that's needed. Researchers should be able to find a segment of genomic nucleic acid in patient samples, proven by DNA sequencing. That has not been done.

Scientists and medical researchers admit they do not know how COVID-19 kills, because to do so would require tissue samples from autopsies. The absence of that data hinders efforts to understand how the new Coronavirus allegedly wreaks havoc. As reported in [Nature](#) [5], “We need those tissues to determine what is killing patients affected by COVID-19. Is it pneumonia? Is it blood clots? Why do they develop kidney failure? We have no clue.”

“With COVID-19, the underlying cause depends upon what and where conditions are reported on the death certificate. However, the rules for coding and selection of the underlying cause of death are expected to result in COVID-19 being the underlying cause more often than not.” [emphasis added]

The weekly death tolls now attributed to an expanded definition from March 21st to April 18th have climbed from 494 to 11,051. But the exemptions and redefinitions suggest that the numbers of deaths attributed to Coronavirus have been counted haphazardly and incorrectly.

[1] *Damned Lies and Statistics*, University of California Press, 2001, p. 160.

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[3] <https://www.cdc.gov/nchs/products/databriefs/db355.htm>

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