

Study: Death counts fail to capture full mortality effects of COVID-19

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More than 200,000 people in the U.S. have died from COVID-19. Some argue that statistic is inaccurate due to inconsistencies in how deaths are being reported. But researchers from the University of South Florida

claim that even if those deaths have been correctly measured, the number doesn't fully convey the true mortality effects of COVID-19.

A study published in the *Journal of Public Health* finds that for each person in the U.S. who died after contracting COVID-19, an average of nearly 10 years of life had been lost. Researchers claim 'years of life lost' is a more insightful measure than death count since it accounts for the ages of the deceased. The tool is often used to determine the effects of non-communicable disease, drug misuse and suicide. They believe years of life lost is especially appropriate given the range of ages at which individuals have died of COVID-19.

"While death counts are a vital initial measure of the extent of COVID-19 mortality, they do not provide information regarding the age profile of those who died," said lead author Troy Quast, professor of health economics in the USF College of Public Health. "By contrast, years of life lost tell us the extent to which deaths are occurring across age groups and can potentially help [healthcare providers](#) and policymakers better target clinical and governmental responses to reduce the number of deaths."

Quast and his research team obtained data from the Centers for Disease Control and Prevention that report COVID-19 death counts by sex, age and state. The study focused on data from Feb. 1 to July 11, during which there had been roughly 130,000 COVID-19 deaths reported. They then compared the ages at [death](#) to life expectancies by age and gender from the U.S. Social Security Administration and to [population data](#) from the U.S. Census Bureau. When taking those factors into account, they calculated that COVID-19 had caused 1.2 million years of life lost during that timeframe. While the analysis only covered the period through mid-July, if past trends were to have continued, that figure at this point would approach 2 million.

Nearly 80 percent of deaths nationwide occurred among people ages 65 and older. Therefore, geographical areas with a younger population had more years of life lost due to COVID-19. For example, one-sixth of the nation's years of life lost is attributed to New York City, the then-epicenter of the outbreak. Another significant factor is pre-existing [medical conditions](#). Males generally have more pre-existing medical conditions than females and accounted for roughly 55 percent of deaths attributed to COVID-19. Researchers adjusted for the higher rate of pre-existing conditions among COVID-19 decedents by reducing expected life expectancy by 25 percent.

Measuring COVID-19 deaths has been difficult due to evolving [diagnostic criteria](#), testing supply constraints and the uncertainties that occur in over-burdened intensive care units. Quast says it's vital to continue monitoring years of life lost due to COVID-19 to help policy makers and health care providers better understand the extent of the outbreak.

More information: Troy Quast et al. Years of life lost associated with COVID-19 deaths in the United States, *Journal of Public Health* (2020). [DOI: 10.1093/pubmed/fdaa159](https://doi.org/10.1093/pubmed/fdaa159)

Provided by University of South Florida

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