COVID's impact is reflected in the sharp rise in U.S. deaths, reaching 3,434,000 between July 2020 and July 2021. This is a record high and 20 percent more than two years ago before the COVID pandemic. Births diminished to just 3,582,000, the fewest since 1979. The primary driver of U.S. population growth has long been the substantial surplus of births over deaths. This surplus has now dwindled to just 148,000, compared to 923,000 two years ago—an 84 percent decline. With immigration also at a low ebb, the population grew by just 393,000—the lowest rate of annual population increase in history and the smallest numeric gain in more than one hundred years.

COVID's Local Impact: More Deaths than Births

These national trends are important, but one stark statistic conveys COVID's grim impact on local communities: more people died than were born in 2,297 (73 percent) of the nation's 3,143 counties between July of 2020 and July of 2021. This is the most counties to suffer such a loss in U.S. history and 60 percent more than before the COVID pandemic began two years ago. When births fail to keep pace with deaths in a county, there is a “natural decrease” in population. Natural decrease has been occurring in some areas for years, but more than 400 counties experienced it for the first time in the last two years. COVID played a central role in this substantial rise in natural decrease. In addition to 475,000 deaths directly attributable to COVID in the last year, it further increased mortality by hindering people's access to treatment for other health conditions and increasing deaths of despair. It also discouraged people from having babies.

Many of the factors causing natural decrease predate the COVID pandemic. It occurs more in nonmetropolitan (rural) areas, and has been especially widespread in agricultural, mining, timber processing, and older industrial regions. However, COVID has expanded its incidence to regions with no history of natural decrease (Figure 1). Natural decrease tends to occur more in counties where the population is older, there are few women of childbearing age, and fertility rates are low. COVID exacerbated its incidence by increasing mortality among older populations, many of whom have preexisting conditions and limited access to health care, especially in rural areas. Vaccination rates are also lower in many rural areas. Natural decrease is now occurring in 80 percent of nonmetropolitan counties compared to 54 percent two years ago. However, metropolitan counties have not been immune, as 62 percent experienced natural decrease in this period, up from 31 percent two years ago.
Looking ahead, the short-term prospects of more natural decrease are high. Recent National Center for Health Statistics provisional estimates for the last half of 2021 show birth and death trends similar to those reported here. If COVID’s impact wanes later in 2022, the incidence of natural decrease will likely diminish, but it will not go away. Even before COVID, the number of deaths was growing annually, while the number of births was diminishing. COVID certainly exacerbated these trends, but over the long-term, mortality is likely to continue to rise among the aging U.S. population, and the decline in births, which began during the Great Recession, appears to be ongoing. How protracted the additional fertility decline and mortality increases associated with COVID will be remains to be seen, but to date they have dramatically reduced population growth in the United States.

Methods and Data
This analysis uses Census Bureau Population Estimates released on March 24, 2022, covering July 1, 2020, to June 30, 2021. The Census Bureau estimation algorithms use 2020 Census data, provisional birth and death data from the National Center for Health Statistics, and additional administrative data to estimate current demographic trends. Readers should recognize that although this analysis uses the best data available and is likely to be indicative of current trends, the data remain estimates. In addition, preliminary analysis suggests the overall quality of the 2020 Census was similar to the 2010 Census, but concerns remain about the coverage for small areas and subpopulations. In addition, the impact of the Census Bureau’s Differential Privacy algorithms on the accuracy of the 2020 Census remain unresolved.

About the Author
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