

Population scientists (who include demographers, economists, and sociologists) bring scientific rigor to the collection, analysis, and dissemination of data on population dynamics—supported by funding from agencies like the National Institutes of Health (NIH) and National Science Foundation (NSF), and access to data produced by federal statistical agencies. Below are examples of federally-supported research findings and data collection on COVID-19 conducted by population scientists.

Selected Research Projects

- **Animations reveal that COVID-19 was transmitted along the path of U.S. interstate highways** Lynne Cossman (University of Texas-San Antonio) and Mark Hayward (University of Texas-Austin) used Census Bureau and other data covering 93% of U.S. counties to quantify urban-rural differences in estimated COVID-19 arrival times. Urban-rural differences were greatest in the most rural counties, implicating road travel as a transmission factor into rural communities.
- **COVID-19 has had a large and disproportionate financial impact on Black and Latinx compared to White older adults.** Marc Garcia (Syracuse University), Amy Thierry (Xavier University), and Claire Pendergast (Syracuse University) used the 2020 COVID-19 module from the Health and Retirement Study [to examine the financial hardship experienced during the pandemic](#). Latinx participants were especially likely to report experiencing hardships such as missed rent or mortgage payment, missed debt payments, missed utility payment, or having trouble buying food with money.
- **COVID-19 Information Dissemination on Social Media.** Investigator Sara Curran (University of Washington) joined with Kisung Lee and Nina Lam (Louisiana State University) use a multidisciplinary approach to examine the geographic and demographic response patterns to COVID-19 information, especially public health messaging. This research examines information trustworthiness during a pandemic, which is crucial to saving lives and mitigating economic and educational losses.
- **Among adults with pre-existing conditions, the risk of being hospitalized with COVID-19 is an estimated 3x higher for those with low incomes vs. high incomes, and 60% higher for those with a high school diploma vs. college degree.** A team of researchers including V. Joseph Hotz (Duke University), Robert Schoeni (University of Michigan), and Judith A. Seltzer (University of California-Los Angeles) examined how COVID-19 has magnified health disparities that exist among groups with differing economic status and education levels. Those with pre-existing conditions had much greater vulnerability for COVID-19 complications if they were lower income and less educated, which meant that racial minorities were also more vulnerable.
- **COVID-19 death rates were twice as high among Minnesota immigrants than among U.S. born residents – even when adjusted for age and gender.** A team including Dr. Elizabeth Wrigley-Field (University of Minnesota) studied the impact of COVID on immigrant populations. They found that among foreign-born Latinos, COVID deaths were concentrated in younger, prime working age men. Among US-born immigrants, mortality was concentrated in long-term care facilities in late 2020 whereas foreign-born mortality occurred earlier and outside of residential institutions.

- **U.S. COVID Deaths Likely Undercounted by 36%; Disproportionate Impact on Poor & Minority Populations.** Irma Elo and Samuel Preston (University of Pennsylvania) and Andrew Stokes (Boston University) analyzed county-level mortality data across the U.S. and found a pattern of excess deaths in high-COVID-19 mortality areas. Areas with the highest excess mortality had populations with greater income inequality, more non-Hispanic Black residents, and less home ownership.
- **Effects of COVID-19 on Older, Diverse Populations.** Kathleen Cagney (University of Michigan), Erin York Cornwell (Cornell University), Christopher Browning (Ohio State University), and Louise Hawkey (NORC) are studying the spatial implications of COVID-19. Focusing on older adults, they examine whether those living in disadvantaged neighborhoods, who are racial and ethnic minorities, or from lower SES households, are less able to comply with social distancing guidelines.
- **Increase in physical isolation during the pandemic has not led to a large increase in loneliness.** Siyun Peng (Indiana University) and Adam Roth (Indiana University) used data from the Health and Retirement Study to examine changes in physical distancing and loneliness between 2016 and 2020 in older adults in the US. At least through 2020, policies affecting social distancing do not seem to have led to an increase in reported loneliness.

Selected Surveys and Data Collection

- The [Understanding America Study](#) is a panel survey of households directed by the University of Southern California of approximately 8,500 respondents representing the entire United States. The UAS has generated valuable data and insights with 26 waves now available for public use.
- The [Detroit Metro Area Communities Study](#) (DMACS) at the University of Michigan is a panel study of households in greater Detroit that tracks multiple topics, from economics and employment to education and health. When Detroit emerged as a COVID-19 “hot spot” early in the pandemic, DMACS launched a series of rapid response surveys about Detroiters’ experiences with COVID-19, fielding four surveys involving 1,880 panelists between late March and late July 2020.
- The [National Health and Aging Trends Study](#) (NHATS), which gathers data from a nationally representative sample of Medicare recipients, launched a COVID-19 supplement to track the impact of the pandemic on older Americans and their family caregivers. NHATS studies factors such as cognitive and physical capacity, use of rehabilitation services, help with daily activities and overall well-being.
- The [Health and Retirement Study \(HRS\)](#), which surveys 20,000 older Americans, launched several [COVID-19 research initiatives](#) in collaboration with sister surveys and made available a linkable [COVID-19 US State Policies Database](#) created by researchers at Boston University. To assess the full extent of exposure to SARS-Cov-2 in the older population at the end of 2020, HRS measured the presence of antibodies to the virus. The share of participants testing positive for antibodies to SARS-Cov-2 was 21.3%. That means prior to the vaccination campaign the great majority of older Americans had no immunity. This suggests the true case rate was 3.8 times as high as the publicly reported cases (5.8%).
- The Inter-University Consortium for Political and Social Research (ICPSR) housed at the University of Michigan, created a [COVID-19 Data Repository](#), an open access data archive for data examining the social, behavioral, public health, and economic impact of the novel coronavirus global pandemic. ICPSR will also produce dissemination materials that synthesize NIH-funded research findings.

The [Population Association of America](#) is a 3,000-member scientific society that promotes high quality population research. The [Association of Population Centers](#) represents 40 federally funded, interdisciplinary centers that sponsor, coordinate and disseminate research on population dynamics and aging.