The National Institutes of Health: Investing in Population Sciences to Improve Health

What is demographic, or population, research?
Demography is the study of populations and how or why they change. Population scientists—including demographers, sociologists, economists, and statisticians—collect and analyze data on trends in births, deaths, family formation and separation; patterns of migration; health and disability; and racial, ethnic, and socioeconomic diversity in populations.

Why does NIH support demographic or population research?
A central component of the NIH mission is “to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce the burdens of illness and disability.”

The health of our population is fundamentally intertwined with the demography of our population. Recognizing the connection between health and demography, the NIH supports population research programs primarily through the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) and the National Institute on Aging (NIA).

NIH is the primary source of discretionary competitive funding for population scientists, supporting grants, surveys, databases, and research centers that the field relies on to conduct research and research training activities.

Why Invest in NIH?
Since 2004, NIH funding has not kept pace with the rate of biomedical inflation. PAA and APC support congressional efforts to put NIH on a trajectory of sustained, predictable growth.

95% of the NIH budget goes directly to research awards, programs, and centers; training programs; and research and development contracts.
In January 2018, researchers from University of Southern California and RAND Corporation published findings from an NICHD-funded study that identified an individual’s community as a risk factor for becoming overweight or obese. The study, which analyzed data from over 1,500 Army personnel and their families living on 38 military bases nationwide, found that for each 1% increment of a county’s obesity rate, the odds of being obese increased 5% for both parents and children. The findings can be used to identify populations at risk of becoming obese and to inform family-based behavioral treatments. JAMA Pediatr. 2018 Mar 1;172(3):239-246. doi: 10.1001/jamapediatrics.2017.4882.

Examples of recent NIH-funded demographic research advances:

**Researchers Confirm Community Is a Risk Factor for Obesity in Adults and Children**

In January 2018, researchers from University of Southern California and RAND Corporation published findings from an NICHD-funded study that identified an individual’s community as a risk factor for becoming overweight or obese. The study, which analyzed data from over 1,500 Army personnel and their families living on 38 military bases nationwide, found that for each 1% increment of a county’s obesity rate, the odds of being obese increased 5% for both parents and children. The findings can be used to identify populations at risk of becoming obese and to inform family-based behavioral treatments. JAMA Pediatr. 2018 Mar 1;172(3):239-246. doi: 10.1001/jamapediatrics.2017.4882.

**Geographic Disparities Exist in U.S. Adult Mortality Rates**

In 2017, several NIA-funded scientists published articles confirming that trends in U.S. adult mortality rates vary greatly not only between states, but also within states. Most notably, scientists found higher adult mortality rates in the South, Midwest and Appalachian regions of the U.S. They further concluded that the opioid epidemic is not solely responsible, suggesting that education and income may also play roles. In 2017, NIA issued a request for applications encouraging more research to reduce and address these regional disparities in adult mortality. NIA blog, “States and Regions Differ Widely in Longevity Trends, January 2018.

The Population Association of America and Association of Population Centers are two affiliated organizations that together represent over 3,000 population scientists, including demographers, economists, sociologists and statisticians, and more than 40 federally-funded population research centers nationwide. Population scientists conduct scientific research on the implications of population change. Their research expertise covers a wide range of issues, including but not limited to: adolescent health and development, aging, health disparities, immigration and migration, marriage and divorce, education, social networks, housing, retirement, and labor.

[www.populationassociation.org](http://www.populationassociation.org) and [www.popcenters.org](http://www.popcenters.org).