# Wealth Ownership and Declining Health in the U.S.

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## Abstract

Recent declines in population health in the U.S. are likely to reflect dramatic changes in household wealth that have occurred over the same period. The association between broad measures of household wealth and overall health is well-documented, but the conditions under which the relationship holds are unclear. In particular, we know little about how specific financial states are associated with particular health outcomes and how this association operates for critical sub-populations. These details have the potential to clarify both the broad wealth-health connection and to provide information about the health of subpopulations such as middle- and lower-wealth households, racial/ethnic minorities, older adults, and women.

We have three interrelated aims that will clarify how and when wealth affects health. **First, we propose to provide updated estimates of the association between family wealth and health outcomes.** We will explore how the association varies across the wealth distribution, by particular assets and debts, and across a large number of specific health outcomes. We will also study how the wealth-health relationship varies by race/ethnicity and gender. **Second, we propose to study how the association between wealth and health varies over time including over the life course and as a result of the 2007-09 recession.** We will focus on the potential protective effects of saved assets on health outcomes following retirement, and we will examine whether these patterns vary by wealth status, race/ethnicity, and gender. **Third, we propose to explore whether family networks mediate the relationship between wealth and health.** Our proposed research is particularly innovative because we will conceive of families as social networks, and we will use cutting-edge methods of social network analysis to study the dynamics of the wealth-health relationship and to disentangle the potential protective effects of family. We will study whether the structure, density, and dynamics of family networks ameliorate the relationship between wealth and health; and we will explore whether the role of family networks varies by wealth status, race/ethnicity, and gender. We will also examine these relationships over the life course and over time.

We propose using three survey datasets to study these processes. The **Panel Study of Income Dynamics**, the **Survey of Income and Program Participation**, and the **Survey of Consumer Finances** each include data about both wealth and health, and using them together will allow us to fully explore our specific aims. We will use various multivariate modeling techniques to study each relationship, including using quantile regression to study differences across the wealth distribution, growth models to study changes over time, and social network analysis to study the role of family networks.

# Community-level determinants of suicidal behavior: Preliminary evidence from California

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**Abstract**

Despite steady declines in mortality in the U.S. and other developed nations over the past century, recent evidence demonstrates a reversal of this trend for middle-aged white Americans. In these individuals, mortality has actually increased over the past 20 years. Of particular concern is evidence that this rising mortality is partially attributable to climbing rates of suicide. Reducing these rising rates will require more attention to modifiable, community-level factors. We propose to examine 3 community-level factors thought to influence suicide: rurality, economic insecurity, and community-level violence. Using the California Health Interview Survey (CHIS), we will examine relations between these 3 factors and self-reported *nonfatal* suicidal behavior, the most potent risk factor for subsequent suicide. We will also explore variation in the relationships between community-level factors and suicidal behavior by age, race/ethnicity, and gender. This work will provide preliminary data for an R01 proposal examining relations between community-level factors and suicide fatality in the entire U.S.

**Hard Times or a Long Time Coming? Examining Widening Inequalities in U.S. Adult Mortality, 1990–2015**

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## ABSTRACT

Life expectancy for the U.S. population has declined for the first time in several decades, and rapid mortality increases among middle-aged Americans have alarmed researchers, health practitioners, and policy-makers. Moreover, U.S. health and mortality differences are widening between states and along rural-urban lines. Leading explanations for rising mortality among U.S. adults suggest that economic distress is driving increases in deaths from drug addiction, alcohol abuse, and self-inflicted harm. Increases in these "despair" deaths are thought to be especially high in rural white America (e.g., in pockets of the "Rust Belt," the "Stroke Belt," and Appalachia). However, the underlying causes of recent increases in U.S. mortality are unclear, and no study has fully investigated how cause-specific mortality trends are affecting Americans in different ways. The general aim of this project is to examine how changes in specific causes of death are driving spatial differences in U.S. adult mortality trends. This project aims to identify how U.S. mortality trends differ (a) by geographic area, (b) by cause of death, (c) by time periods and birth cohorts, and (d) by race/ethnicity and gender. The newly established Rocky Mountain Research Data Center at CU Boulder will be used to link official county death records from the National Vital Statistics System with official county population estimates from the U.S. Census Bureau. Annual population counts and deaths will be matched for every U.S. county by single-year age, by sex, and by race/ethnicity. Annual age-specific mortality rates will be estimated for male and female U.S. adult populations in every state and county between 1990 and 2015. Changes in between-state and within-state differences in all-cause and cause-specific mortality rates will be documented across this time period, thereby revealing where and how inequalities in U.S. mortality have grown in recent years. How U.S. mortality trends are associated with various county-level characteristics (e.g., median income, migration, educational attainment) will also be examined.

Network on Life Course Health Dynamics and Disparities in 21st Century America Pilot Awards Program

# The Contribution of Diabetes to Trends in Life Expectancy in the United States

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**Abstract**

This project focuses on the impact of diabetes on levels, trends, and differentials in life expectancy by sex and race/ethnicity in the United States. The prevalence of diabetes in the US has risen rapidly. The age-standardized prevalence of diabetes increased three-fold between cohorts born in 1920-29 and 1970-79. In 2011, the prevalence of diabetes at age 20 and above, when measured by Hemoglobin A1c, fasting plasma glucose or 2-hour plasma glucose level, was estimated to be 14.3%. Racial/ethnic disparities in diabetes were substantial; the age-standardized prevalence was significantly higher among non-Hispanic Blacks (21.8%) and Hispanics (22.6%) than among non-Hispanic Whites (11.3%). The most commonly-cited estimator of the contribution of diabetes to American mortality is the frequency of its appearance on the death certificates as the underlying cause of death. However, the frequency with which diabetes is listed on the death certificate as the underlying cause of death is not a reliable indicator of its actual contribution to the national mortality profile and is likely to substantially underestimate its importance. In this project, we take a different approach to estimating the contribution of diabetes to US mortality levels, trends and differentials by using a nationally representative cohort—the National Health Interview Survey—to identify the excess mortality risk among people with diabetes. That excess risk will be used in combination with the prevalence of diabetes among deaths to estimate the percentage of deaths (population attributable fraction—PAF) that would not have occurred in the absence of diabetes. We will also estimate the contribution of this excess to US life expectancy and to disparities in life expectancy by sex and race/ethnicity. In addition, we will investigate the contribution of rising levels of diabetes and changes in diabetes-related fatality to changes in US life expectancy by sex and race/ethnicity between 1988 and 2011. Several recent articles on American mortality trends have noted a deterioration of death rates for white Americans since 1999. Using estimates of the risks associated with diabetes combined with changes in the prevalence of diabetes, we can evaluate the contribution of diabetes to age-specific mortality trends more precisely than has been the case in prior studies.