The Rise and Fall of African-American Mortaltiy: Impacts of Cause of Death on Life Expectancy

> Ward Kingkade Projections Branch Population Division U.S. Census Bureau

During the 1980s life expectancy at birth fell in the Black population of the United States, especially among males. Beginning in the 1990s and continuing to present, it has recovered. Life expectancy at birth is currently rising at a rapid pace in the Black population, more than 0.3 years per annum among males and 0.275 years among females over the period 2000-2004. The proposed study investigates the proximate determinants of these phenomena as reflected by cause of death for the period 1980-2004. A key question concerns the relative impact of external causes of death such as accidents and violent deaths as compared to infectious disease and longer term degenerative diseases.

Another important question concerns the sex differentials in the observed phenomena. The decline and recovery of African-American life expectancy has been more pronounced among men than among women. The extent to which these differences can be attributed to traditionally masculine behavior patterns related to injuries, accidents, and violent death, to causes of death such as suicides often resulting from depression or infarcts commonly precipitated by male reactions to stress shall be another focus of attention.

The proposed analysis shall assess impacts on life expectancy by the component methodology of decomposing differences in life expectancy into the contributions of various age categories and causes of death developed by Arriaga (1985). A valuable feature of this methodology is that person-years lived in a given age interval can be distinguished. Because Black mortality data at late age are often suspect (Coale and Kisker, 1986; Preston et al., 1996), an analysis of person years lived in the working ages (20-60) and from birth to age 60 will be offered. The method also lends itself well to determining the relative impact of various causes and their age incidence, such as accident mortality in the late teens and early twenties. A related measure, years of life lost, provides a descriptive index of the differential impact of mortality.

The data employed in the analysis consist of life tables constructed from death rates calculated from deaths reported in the annual Public Use mortality datasets distributed by the National Center for Health Statistics and the U.S. Census Bureau's intercensal and postcensal population estimates. The life tables are constructed in single year age detail from the underlying data.