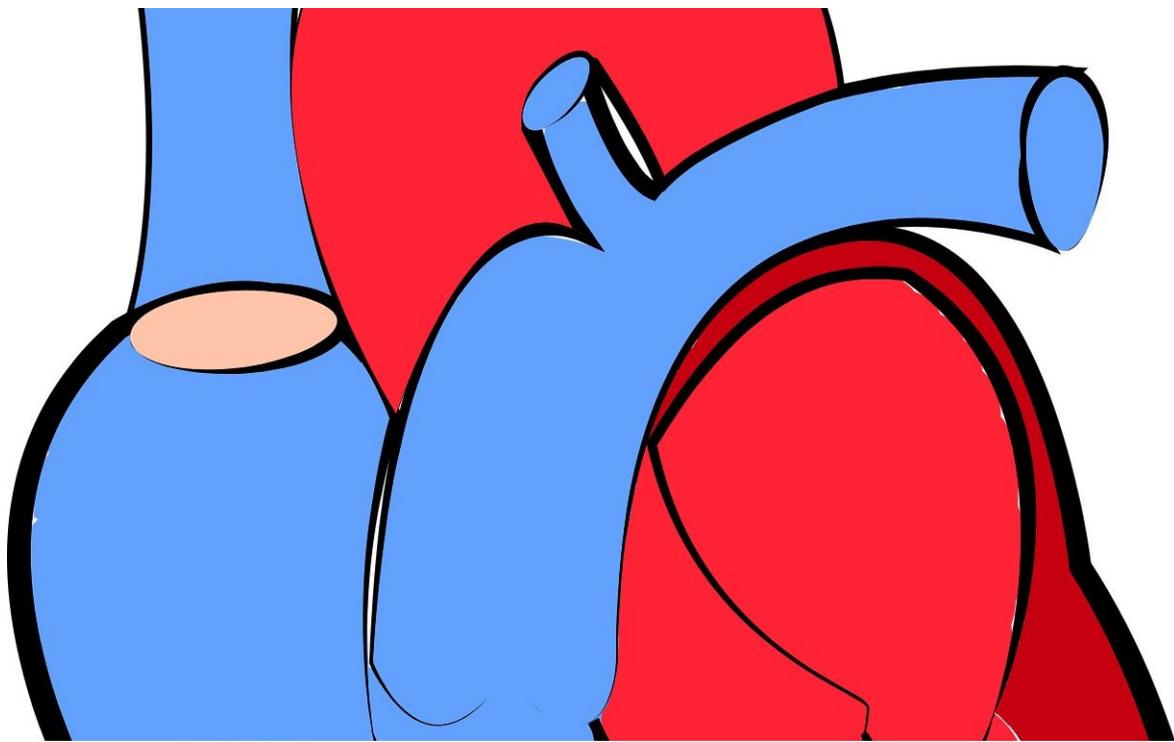


Higher risk of sudden cardiac death among African Americans may be associated with income, education disparities

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African Americans—especially African American women—have a significantly higher risk of sudden cardiac death during their lifetime than whites, and much of the disparity can be attributed to income and

education levels, according to new research in the American Heart Association's journal *Circulation*.

"We wanted to explain the risk of sudden cardiac death and identify factors that could explain the differences," said Eliseo Guallar, M.D., Ph.D., the lead author of the study from the Johns Hopkins University Bloomberg School of Public Health. "We found that overall, African Americans had approximately double the lifetime risk of sudden cardiac death compared to whites. African-American women had about triple the risk compared to white women."

Income and educational disparities were the main factors explaining the [racial differences](#) in risk, followed by hypertension and diabetes, according to the study. Income, education, hypertension, diabetes, and other cardiovascular risk factors accounted for about 65 percent of the difference.

"Low income and education are associated with unhealthy behaviors, low disease awareness and limited access to care, which could all contribute to poor outcomes," said Guallar. "However, our understanding of the mechanisms for racial differences in sudden cardiac death is still incomplete and additional research is needed."

Sudden cardiac death results when the heart unexpectedly stops beating, preventing [blood flow](#) to the brain and other vital organs. It's usually caused by a sudden arrhythmia—a malfunction in the heart's electrical system. Unless a sudden cardiac arrest is treated rapidly, within minutes, it is usually fatal.

The data for this research came from the Atherosclerosis Risk in Communities (ARIC) study, a large prospective community study of cardiovascular disease and its risk factors. The study included 3,832 African Americans and 11,237 whites who were followed for more than

27 years, up to age 85.

By age 85, the percentage of people in the study who suffered sudden cardiac death was:

- African American men: 9.6 percent
- African American women: 6.6 percent
- White men: 6.5 percent
- White women: 2.3 percent

The researchers were unable to determine the cause of the arrhythmias that resulted in [sudden cardiac death](#) of individuals in the study. They also could not evaluate whether the racial differences were due to differences in the rate of life-threatening arrhythmias or differences in resuscitation rates.

However, they say their findings point to the need for better prevention methods and access to cardiac care, especially among African Americans. Those efforts would include control of cardiovascular risk factors such as [high blood pressure](#) and expanding the number of people trained in cardiopulmonary resuscitation (CPR) especially in predominantly African-American neighborhoods.

More information: *Circulation* (2019). [DOI: 10.1161/CIRCULATIONAHA.118.036553](#)

Provided by American Heart Association

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