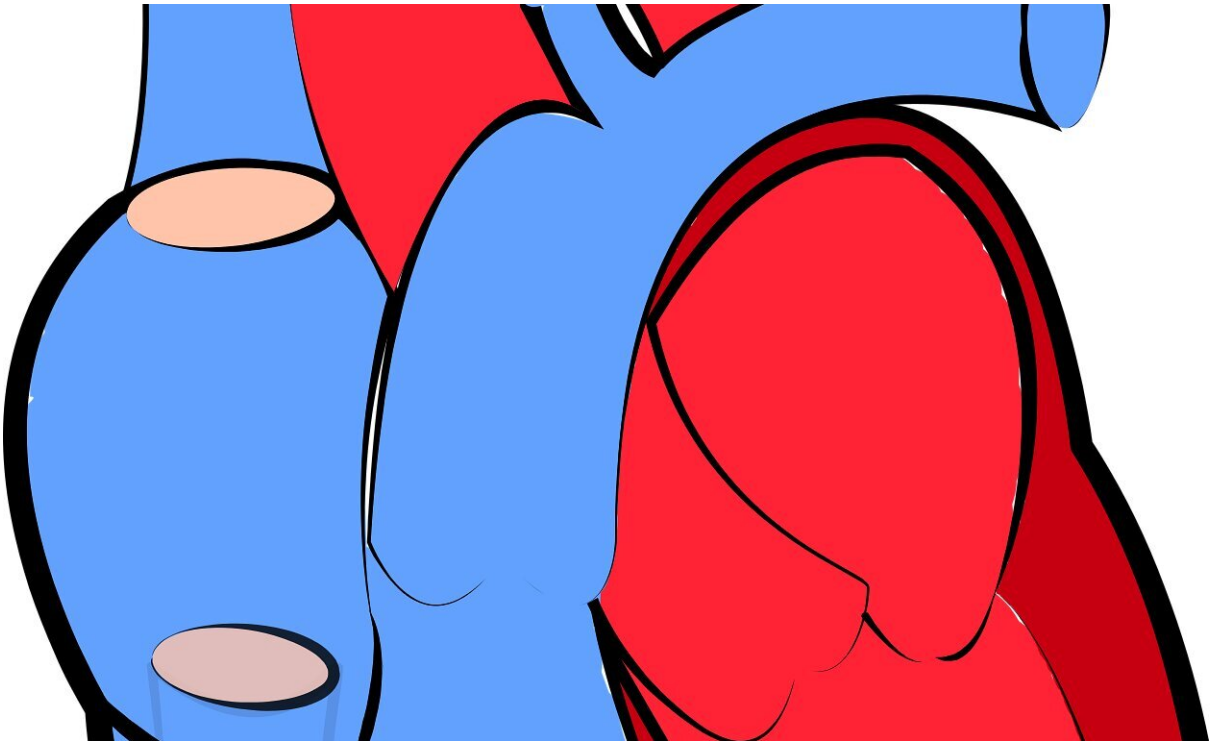
American Indians and Alaska Natives have disproportionately higher rates of CVD

May 28 2020



Credit: CC0 Public Domain

Type 2 diabetes (T2D) affects American Indians and Alaska Natives at approximately three times the rate of white Americans and is closely linked to the disproportionately high rates of cardiovascular diseases such as heart attacks and strokes, according to the American Heart Association Scientific Statement "Cardiovascular Health in American

Indians and Alaska Natives," published today in the Association's flagship journal *Circulation*.

The statement provides an overview for the general public, health care providers and policy makers about the major cardiovascular challenges faced by this population group who have one of the highest rates of cardiovascular disease in the United States.

American Indians and Alaska Natives develop cardiovascular diseases at earlier ages than white Americans. Heart disease rates are approximately 50% higher among the 5.2 million Americans who self-identify as American Indian and Alaska Native, compared to white Americans. And, more than one-third of deaths attributed to cardiovascular disease occur before the age of 65.

Obesity, a major contributor to T2D, is an epidemic among American Indians and Alaska Natives—it is estimated that 30-40% of American Indians have obesity. The Strong Heart Study, cited in the statement, found that some of the risk for obesity and diabetes is genetically inherited. Given this propensity, it is important for health care professionals to assess coronary heart disease risk and continually monitor for coronary heart disease in American Indians and Alaska Natives.

"There are urgent cardiovascular health risks for American Indians and Alaska Natives that health care professionals and policy makers should not ignore. We strongly encourage patients, health care professionals and most importantly, community leaders to take steps to prevent and fight cardiovascular disease," said Khadijah Breathett, M.D., M.S., FAHA, chair of the writing committee for the Scientific Statement, assistant professor of medicine in the division of cardiology at the University of Arizona, and advanced heart failure and transplant cardiologist at Banner—University Medical Center in Tucson, Arizona.

The social determinants of health facing American Indians and Alaska natives are longstanding and complex, and access to health care is limited. In 2017, 19% did not have health insurance. The federal health program, Indian Health Service, provides health care for 1.6 million American Indians and Alaska Natives. However, that accounts for less than one-third of the total American Indian and Alaska Native population in the U.S.

Historical events such as displacement, war, infectious disease, unfulfilled agreements and decimation of tribal lands by the U.S. government in the 1800s created a cultural mistrust among many American Indians and Alaska Natives. Being forced to move from their native lands and living in rural areas without access to proper health care contribute to the issue. Currently, 21% of American Indians live below the federal poverty line.

"Racial and ethnic minority groups in the U.S. have suffered from inequitable policies for hundreds of years. These policies have contributed to mistrust in the traditional health care system. The most effective way to create change is through restructuring of inequitable policies and empowerment of communities," said Breathett.

The statement notes that the most effective interventions by health care professionals start by seeking the support of community leaders, building a relationship with the community, assessing barriers and resources for individuals, creating a method of public communication and developing an action plan for progress.

Nearly 32% of American Indians and Alaska Natives use tobacco, a rate almost twice as high as other ethnic populations in the U.S. Anti-tobacco intervention methods, such as media campaigns and modified smoking policies, are less effective than culturally adapted methods of community reinforcement.

In addition to individual risk factors, there are others that need to be addressed at the policy level, including the exposure to toxic metals due to groundwater contamination, which is particularly high in the Midwest and Southwest. Toxic metal exposure to arsenic and cadmium are associated with increased development of atherosclerosis as well as increased total cholesterol levels in multiple American Indian populations. Atherosclerosis is the slow narrowing of arteries that underlies most heart attacks and strokes.

Physician bias influences healthcare delivery among racial and ethnic minorities. Experiences of discrimination and microaggressions in the healthcare setting have correlated with worse physical and mental health among American Indians with chronic diseases. Implicit bias training may help reduce the impact of bias in decision-making between healthcare professionals and American Indian and Alaska Native patients.

Shared decision-making between a patient and their health care professional has been a longstanding tradition among some American Indians and Alaska Natives. Many participate in community-talking circles in which everyone in the group has the right to provide uninterrupted perspectives. Talking circles have been instrumental in providing education and empowering the American Indian and Alaska Native community to manage T2D.

The greatest risk factor for cardiovascular disease among American Indians and Alaska Natives is T2D, which is exacerbated by the social determinants of health experienced by this group. Community-based, culturally appropriate interventions are necessary to reduce T2D risk by encouraging physical activity and weight loss; controlling cardiovascular disease risk factors, such as high cholesterol and high blood pressure; and promoting tobacco cessation.

"Health care providers must individualize care by identifying the individual patient's needs and matching them to the appropriate resources such as community-based interventions. We encourage patients, healthcare professionals and community stakeholders to learn the risk factors for cardiovascular disease and take steps to fight cardiovascular disease before it starts. We are all in this together," said Breathett.

More information: *Circulation* (2020). DOI: 10.1161/CIR.0000000000000773

Provided by American Heart Association