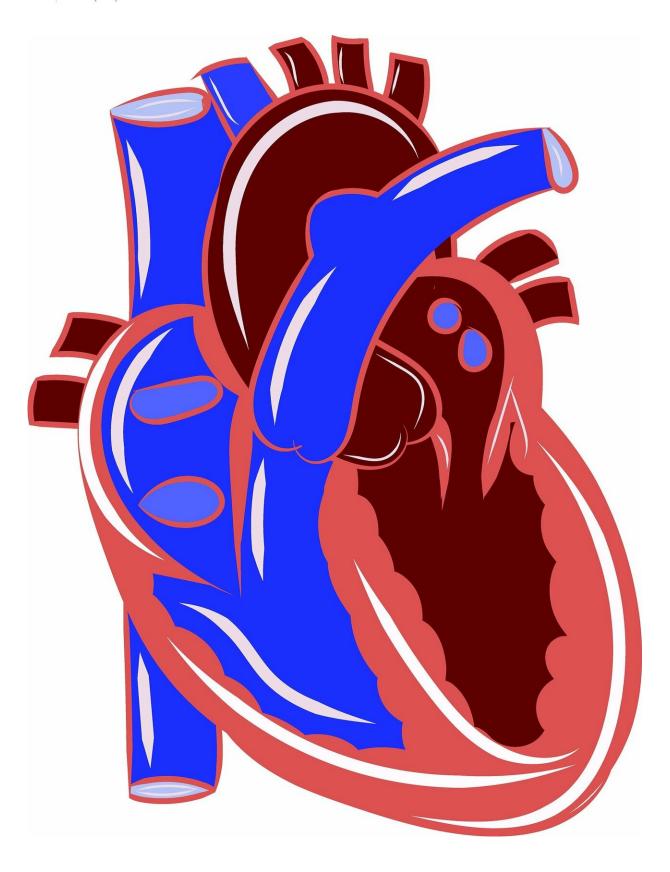


## 'One-size-fits-all' flawed for assessing cardiovascular disease risk among Asian Americans

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In a large, retrospective study covering data from the last two decades, death rates for cardiovascular diseases in the U.S. varied among people from various Asian ethnicity subgroups, with death rate trends that stagnated in some subgroups and increased in others, according to new research published today in *Circulation: Cardiovascular Quality and Outcomes*, a peer-reviewed journal of the American Heart Association.

Asian Americans make up the fastest growing racial/ethnic group in the U.S., increasing 81%—from 11 million to 19 million—between 2000 and 2019, and the population is projected to rise to 36 million by 2060, according to the Pew Research Center. Yet <u>public health</u> and <u>clinical data</u> have commonly combined Asian Americans into one "Asian" category, which obscures health outcomes (including <u>death rates</u>) and risks such as <u>high blood pressure</u>, obesity, Type 2 diabetes and smoking for the various subgroups of Asian people.

"The Asian American population is very diverse in how the subgroups experience health outcomes," said lead study author Nilay S. Shah, M.D., M.P.H., an assistant professor of cardiology and preventive medicine at Northwestern University's Feinberg School of Medicine in Chicago and an affiliated global faculty member at Stanford University's Center for Asian Health Research and Education. "It is important to recognize evidence-based strategies that are effective for one population may not necessarily be effective for people in another group. There is tremendous opportunity to improve health for Asian Americans by focusing and tailoring research and care to the unique needs and cultural characteristics of these communities."

Examining U.S. <u>death</u> certificates from 2003 to 2017 available from the National Center for Health Statistics, researchers analyzed death rates for <u>ischemic heart disease</u> (also known as <u>coronary heart disease</u>); heart



failure; and <u>cerebrovascular disease</u>, which includes stroke. Data was compiled and stratified among Asian adults who reported their subgroup as Asian Indian, Chinese, Filipino, Japanese, Korean or Vietnamese, which are the Asian categories available on U.S. death certificates since 2003. Health information about these various subgroups of Asian Americans were compared to the death certificates of white and Hispanic people.

Comparing deaths of more than 600,000 Asian Americans with more than 30 million non-Hispanic white people and more than 2 million Hispanic people, researchers found:

- Death rates from ischemic heart disease significantly decreased between 2003-2017 in all women (For example, in 2003 vs. 2017, the rates decreased from 67 per 100,000 to 35 per 100,000, respectively, for Japanese women, and from 79 per 100,000 to 41 per 100,000, respectively, among Chinese women); significantly decreased in Chinese, Filipino, Japanese and Korean men and non-Hispanic white and Hispanic men, while remaining stagnant in Asian Indian and Vietnamese men. (In 2003 vs. 2017, the ranges varied: remained the same level, at 71 per 100,000 among Vietnamese men; and decreased from 162 per 100,000 to 107 per 100,000, respectively, among Filipino men.) Asian Indian women had the highest death rates for ischemic heart disease in 2017.
- Heart failure death rates were unchanged in Chinese, Korean and non-Hispanic white women and Chinese and Vietnamese men between 2003-2017; and significantly increased among Filipino, Asian Indian and Japanese individuals, Vietnamese women and Korean men. Asian Indian people had the highest heart failure death rates among all Asian American subgroups in 2017 (14 per 100,000 in women, 15 per 100,000 in men).



Cerebrovascular disease death rates decreased among Chinese,
Filipino and Japanese women and men and did not shift among
Asian Indian, Korean and Vietnamese women and men.
Vietnamese people had the highest cerebrovascular disease death rates in 2017.

"For a long time, because Asian Americans were grouped into one category, it appeared that Asian people in the U.S. did not have as high a risk for heart and vascular diseases compared with other groups," Shah said. "Our findings indicate this is inaccurate. By separating Asian subgroups, we can identify populations and communities that are at higher cardiovascular disease risk, and they may benefit from enhanced heart disease prevention and treatment strategies."

The study's assessment of death rates relied on administrative codes for causes of death, which may sometimes misclassify the cause of death. Despite the potential limitations of misclassification, the researchers noted the data still provides the most comprehensive national surveillance of cardiovascular and cerebrovascular death rates among people from diverse racial and ethnic backgrounds.

An accompanying editorial by Monica Parks, M.D.; Brahmajee Nallamothu, M.D., M.P.H.; and P. Michael Ho M.D., Ph.D., notes that while this manuscript is an important contribution to the information available on this topic, it "only scratches the surface of needed research." Nallamothu is editor-in-chief of the *Circulation: Cardiovascular Quality and Outcomes* journal, and Ho is deputy editor of the journal.

The editorial notes the U.S. Department of Health and Human Services (HHS) first added Asian American subpopulation groups of Asian Indian, Chinese, Filipino, Japanese, Korean and Vietnamese to birth and death certificates in 2003. In 2010, the Affordable Care Act mandated that all health surveys sponsored by HHS must also include these



subgroups and classifications. It was through these mandates that Shah et al.'s study was possible.

"It is increasingly clear that not only has the ethnic makeup of the U.S. population changed, but the aggregate living experiences of these communities have evolved and may drive wildly different interactions with the health care system. Simple checking of a box next to "white" or "Asian American" is insufficient to capture such complexity," they wrote.

Co-authors with Shah are Kevin Xi, B.S.; Kristopher I. Kapphahn, M.S.; Malathi Srinivasan, M.D.; Timothy Au, B.S.; undergraduate students Vedant Sathye, Vaibhav Vishal and Han Zhang; and Latha P. Palaniappan, M.D., M.S.

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