

Global Burden of Cardiovascular Disease (CVD) in South Asia

Turning Data Into Action

The **term South Asian** refers to people who are born in or can trace their ancestry to Bangladesh, Bhutan, India, Nepal and Pakistan.

In 2019, the proportion of premature cardiovascular (CV) deaths was ~39% in Asia vs. 23% in the U.S. and 22% in Europe. Leading causes of death in South Asia are ischemic heart disease and stroke, followed by rheumatic heart disease.

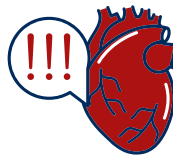
South Asians make up about 25% of the world population.



CV Burden in South Asia: Fast Facts



Lower-income South Asian countries like India, Nepal and Pakistan have a higher proportion of premature CV deaths due to communicable, maternal, neonatal, and nutritional diseases, compared with higher-income countries in Asia.



The burden of premature ASCVD is higher among South Asians regardless of their residence in South Asia or elsewhere.



The prevalence of type 2 diabetes in South Asia is projected to increase by more than 150% from 2000 to 2035.



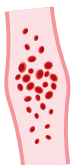
Roughly 20% of deaths due to ischemic heart disease and stroke in South Asia were attributable to ambient particulate air pollution, compared with the global average of ~15%.



Among all CV risk factors assessed, high systolic blood pressure accounted for the largest proportion of DALYs, followed by dietary risks.



The risk of ischemic heart disease in South Asians is elevated even at a much lower low-density-lipoprotein cholesterol (LDL-C) level compared with other ethnic groups.



In 2021, lower extremity peripheral arterial disease had the largest percent increase (61.9%) in CVD cause-specific age-standardized mortality since 1990.

Thank you to JACC Global Burden of CVD Webinar moderator George A. Mensah, MD, FACC, and participants K. Srinath Reddy, MD, DM, MSc; Alka Kanaya, MD; and Y.S. Chandrashekar, MD, DM, FACC, for sharing their perspectives on the global burden of CVD in South Asia.

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CALL TO ACTION: PREVENTING CVD BEFORE IT STARTS



Population strategies and targeted early-childhood education on healthy lifestyles



Early screening and diagnosis



Increased focus on diet and physical activity

Further research and implementation studies are needed to understand population-specific risk factors and patterns and the metabolic milieu. These results can inform population-specific guideline adherence and the creation of point-of-care tools like like risk calculators and clinical decision support.

Learn More:



Collaborations like the Global Burden of CVD Initiative can help with understanding the specific burden of cardiovascular disease in South Asia and identifying those areas where solutions and direct action can have the greatest benefit. Scan the QR code to access the JACC Global Burden of CVD Hub, including the most recent Global Burden of CVD report, interactive tool and more.

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Lindstrom, M, DeCleene, N, Dorsey, H. et al. Global Burden of Cardiovascular Diseases and Risks Collaboration, 1990-2021. *J Am Coll Cardiol.* 2022 Dec, 80 (25) 2372-2425. <https://doi.org/10.1016/j.jacc.2022.11.001>

Gupta, K, Modi, S, Ananthasubramaniam, K. Toward Understanding Cardiovascular Risk Burden in South Asians: A Major Step Forward. *JACC: Asia.* 2022 Dec, 2 (7) 912-915. <https://doi.org/10.1016/j.jacasi.2022.10.005>



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