

Genetic ancestry and hypertension risk

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Black individuals have higher rates of hypertension compared to Americans of European or Hispanic ancestry. Yet the contributions of genetic ancestry to this ethnic disparity in hypertension risk are not well known.

Digna R. Velez Edwards, Ph.D., MS, and colleagues in Nashville, Memphis, Atlanta and Boston conducted trans-ethnic association

analyses of ancestry proportions in more than 300,000 participants in the Million Veteran Program (MVP), a study of the genetic contributions to disease led by the US Department of Veterans Affairs (VA).

The analyses, applied to five reference populations in the 1000 Genomes Project catalog of human genetic variation, revealed compelling evidence of West African ancestry as a risk factor for hypertension, and European ancestry as protective against the development of hypertension.

While environmental and lifestyle factors are important contributors to hypertension, this study, published in the April issue of the *Journal of Hypertension*, provides further evidence that a portion of blood pressure trait racial disparities is due to genetic differences between ancestries.

More information: Jacob M. Keaton et al. Associations of biogeographic ancestry with hypertension traits, *Journal of Hypertension* (2021). [DOI: 10.1097/HJH.0000000000002701](https://doi.org/10.1097/HJH.0000000000002701)

Provided by Vanderbilt University

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