

Blacks develop high blood pressure one year faster than whites

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African-Americans with prehypertension develop high blood pressure a year sooner than whites, according to research reported in *Hypertension: Journal of the American Heart Association*.

Blacks with prehypertension also have a 35 percent greater risk of progressing to [high blood pressure](#) than whites, according to health records of 18,865 adults 18 to 85.

Prehypertension is blood pressure ranging between 120/80 mm Hg and 139/89 mm Hg. Hypertension is 140/90 mm Hg or higher.

Previous research has shown that [coronary heart disease](#), stroke and high blood pressure are more common among blacks than whites.

"The fact that African-Americans progress faster to hypertension has a direct link to the higher prevalence of hypertension and its complications, such as stroke and kidney disease, in blacks than whites," said Anbesaw Selassie, Dr.P.H., lead researcher and an epidemiologist at the Medical University of South Carolina in Charleston.

Selassie and his colleagues analyzed [electronic health records](#) from 197 community-based clinics in the Southeastern U.S. from 2003-2009.

Patients didn't have high blood pressure at the beginning of the study. Thirty percent of the patients were black and 70 percent were white.

Patients who did not have high blood pressure at baseline and whose blood pressure was checked at least four times over two years, had high blood pressure if two consecutive measurements were at or above 140 mmHg systolic or 90 mmHg diastolic.

The researchers analyzed each person's relative risk of progressing from prehypertension to high blood pressure as a function of race, accounting for the effects of other factors that could affect risk,

including age, sex, weight, initial blood pressure, type 2 diabetes and [kidney disease](#).

Some conditions beyond race were also strongly associated with a faster conversion to high blood pressure such as systolic blood pressure 130-140 and age 75 years and older. Other factors associated with faster conversion to high blood pressure include being overweight or obese, and having [type 2 diabetes](#).

Lifestyle changes to reduce risk for people with prehypertension include weight loss, physical activity, a diet high in fruits and vegetables and low in salt and fat, and moderate alcohol consumption. Treatment guidelines don't call for using medications to lower the risk of high [blood pressure](#) for people with prehypertension.

The study results suggest a strong need for more aggressive early interventions and lifestyle changes for African-Americans with prehypertension, Selassie said. "I firmly believe that without early therapeutic interventions such as medication, we cannot narrow the gap between blacks and whites on these outcomes."

"Ultimately, tangible and fundamental answers must be forthcoming in order to explain why the black population develops hypertension more frequently and rapidly," said Edward D. Frohlich, M.D., Alton Ochsner Distinguished Scientist at the Ochsner Clinic Foundation in New Orleans, La., in an accompanying editorial.

Frohlich said one possible explanation may be based on African Americans' greater dietary intake of salt during a lifetime.

Provided by American Heart Association

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