

## Longitudinal study tracks high blood pressure, stroke risk

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(HealthDay)—For young and middle-aged adults, hypertension at

baseline, at age 30 years, and at age 40 years is associated with an increased risk for stroke, according to a study published online March 29 in *Hypertension*.

Yariv Gerber, Ph.D., from Tel Aviv University in Israel, and colleagues examined the longitudinal relationship between blood pressure (BP) and [stroke incidence](#) among young and middle-aged adults. BP measured during nine examinations from 1985-1986 to 2015-2016 was used to classify 5,079 participants according to the 2017 American College of Cardiology/American Heart Association guideline. Stroke events were adjudicated to 2018.

The researchers found that [stroke](#) events occurred in 100 participants. The incidence of stroke per 100,000 persons was higher in Blacks than Whites (120 versus 29). Compared with normal BP, stage 2 hypertension was associated with a higher risk for stroke at baseline (hazard ratio, 3.72), as a time-dependent variable (hazard ratio, 5.84), at age 30 years (hazard ratio, 4.14), and at age 40 years (hazard ratio, 5.59) after adjustment for sociodemographic and cardiovascular risk factors. More modest increases in risk were seen with elevated BP and stage 1 hypertension.

"We demonstrated that the association of high blood pressure with stroke varies with age, strengthening from young adulthood to midlife," Gerber said in a statement. "This stresses the need for early public health interventions to maintain optimal [blood pressure](#) levels in young adulthood, particularly in high-risk Black young adults."

**More information:** [Abstract/Full Text \(subscription or payment may be required\)](#)

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