

# Systolic blood pressure variability linked to mortality, morbidity

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(HealthDay)—Systolic blood pressure variability (SBPV) is associated

with mortality, coronary heart disease (CHD), stroke, and end-stage renal disease (ESRD), according to a study published in the Sept. 27 issue of the *Journal of the American College of Cardiology*.

Elvira O. Gosmanova, M.D., from the Stratton Veterans Affairs Medical Center in Albany, N.Y., and colleagues examined the impact of increased visit-to-visit variability in a large cohort of U.S. veterans. Data were included for 2,865,157 patients with eight or more outpatient BP measurements. SBPV was measured and correlated with all-cause mortality, incident CHD, stroke, and ESRD.

The researchers found that higher intraindividual SBPV was seen in association with sociodemographic variables (older age, male sex, African-American race, divorced or widowed status), clinical characteristics (lower baseline estimated [glomerular filtration rate](#), higher SBP, and diastolic BP), and comorbidities (presence of diabetes, hypertension, cardiovascular disease, and lung disease). For standard deviation quartile 2 through 4 versus the first quartile, the multivariable-adjusted hazard ratios associated with all-cause mortality, CHD, stroke, and ESRD were incrementally higher.

"Higher SBPV in individuals with and without hypertension was associated with increased risks of all-cause mortality, CHD, stroke, and ESRD," the authors write. "Further studies are needed to determine interventions that can lower SBPV and their impact on adverse health outcomes."

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