

Recommended blood pressure level differs for heart patients with diabetes

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The best blood pressure range for patients with diabetes and heart disease appears to be slightly higher than what is recommended for healthy adults, according to a study in today's *Journal of the American Medical Association*.

In fact, the blood pressure range considered normal — less than 120 systolic and less than 80 diastolic — may actually be risky for those with a combined diagnosis of [diabetes](#) and coronary artery disease, report University of Florida researchers from the International Verapamil SR-Trandolapril study, known as INVEST.

Optimum systolic blood pressure levels should be between 130 and 140 for patients coping with the diabetes-heart disease combination, according to Rhonda Cooper-DeHoff, an associate professor of pharmacy and medicine at UF.

Efforts to reduce systolic blood pressure to below 130 did not offer any additional benefit to patients with diabetes and coronary artery disease, compared with reduction of systolic blood pressure to between 130 and less than 140.

“Sustained blood pressure lower than 120 is considered optimal for healthy people,” Cooper-DeHoff said. “But, our data show that for these patients with diabetes, the range may actually cause an increased risk for heart attack, stroke and death.”

As many as two out of three adults with diabetes have [high blood pressure](#). Blood pressure greater than 140 is still associated with a nearly 50 percent increase in cardiovascular risk in these patients.

“While lowering blood pressure to less than 140 is very important, based on our data and data recently published by others, it is now clear that in patients with diabetes, it is not necessary, and may be harmful to lower blood pressure too much,” Cooper-DeHoff said.

In addition, the study for the first time reveals that this group of patients had an increased risk for death when their blood pressure was controlled to lower than 115 systolic — the range recommended as normal by the American Heart Association.

The findings in the Journal of American Medical Association formalize a report Cooper-DeHoff made at the American College of Cardiology’s 59th annual scientific session earlier this spring.

[Heart disease](#) or stroke is the top cause of death for people with diabetes, affecting more than 60 percent of patients, according to the AHA. High blood pressure, common in diabetes, doubles the risk of cardiovascular disease.

The INVEST study is the first to evaluate the effects of blood pressure-lowering in diabetic patients diagnosed with coronary [artery disease](#). Researchers analyzed data collected from 6,400 patients from fall 1997 to spring 2003. The patients, who were 50 or older, were recruited from more than 850 sites in 14 countries.

The researchers further consulted the national death index for U.S.-enrolled patients for an additional five years to compare death rates of patients based on their [blood pressure](#) category ranging from tightly controlled to non-controlled hypertension.

Abbott Laboratories provided funding for INVEST. Cooper-DeHoff also received support from a National Institutes of Health career development award.

Provided by University of Florida

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