

Blood pressure medicines reduce stroke risk in people with prehypertension

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People with prehypertension had a lower risk of stroke when they took blood pressure-lowering medicines, according to research reported in *Stroke: Journal of the American Heart Association*.

Prehypertension, which affects more than 50 million adults in the United States, is blood pressure ranging between 120/80 mm Hg and 139/89 mm Hg. Hypertension is 140/90 mm Hg or higher.

"Our study pertains to people with pre-hypertensive [blood pressure levels](#) and shows that the excess risk of stroke associated with these high-normal readings (top number 120-140) can be altered by taking blood pressure pills," said Ilke Sipahi, M.D., lead author of the study and associate director of [Heart Failure](#) and Transplantation at the Harrington-McLaughlin Heart and Vascular Institute in Cleveland, Ohio.

In a meta-analysis of 16 studies, researchers examined data that compared anti-hypertensive drugs against placebo in 70,664 people with average baseline blood pressure levels within the pre-hypertensive range. The researchers found:

- Patients taking blood pressure-lowering medicines had a 22 percent lower risk of stroke compared to those taking a placebo. This effect was observed across all classes of anti-hypertensive drugs studied.
- No significant reduction in the risk of heart attack occurred, but

there was a trend toward lower [cardiovascular death](#) in patients taking blood pressure medications compared to those on placebo.

- To prevent one stroke in the study population, 169 people had to be treated with a blood pressure-lowering medication for an average 4.3 years.

[American Heart Association](#) treatment guidelines call for [lifestyle changes](#), not medications, to reduce blood pressure in people with [prehypertension](#). Those lifestyle changes include weight loss, physical activity, a diet rich in fruit and vegetables and low in salt and fat, and keeping [alcohol consumption](#) moderate (no more than two drinks per day for men and no more than one drink per day for women).

"We do not think that giving blood pressure medicine instead of implementing the lifestyle changes is the way to go," Sipahi said. "However, the clear-cut reduction in the risk of stroke with blood pressure pills is important and may be complementary to lifestyle changes."

The cost of long-term therapy and the risks associated with blood pressure medicines need to be discussed extensively within the medical community before undertaking guideline changes, Sipahi said.

Provided by American Heart Association

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