

# 1999 to 2018 saw decline in mean BP among US children, teens

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(HealthDay)—Although mean levels of systolic and diastolic blood

pressure (BP) have declined overall in U.S. children and adolescents during the past 20 years, recent patterns raise concerns about a reversal of this trend, according to a study published online April 1 in *JAMA Network Open*.

Shakia T. Hardy, Ph.D., from the University of Alabama at Birmingham, and colleagues used data from the National Health and Nutrition Examination Survey (1999-2002 to 2015-2018; 9,117 [children](#) aged 8 to 12 years and 10,156 adolescents aged 13 to 17 years) to assess changes in systolic BP (SBP) and diastolic BP (DBP) levels among U.S. children during the past 20 years.

The researchers found that among children aged 8 to 12 years, the age-adjusted mean SBP decreased from 102.4 mm Hg in 1999-2002 to 101.5 mm Hg in 2011-2014 and then increased to 102.5 mm Hg in 2015-2018, while age-adjusted mean DBP decreased from 57.2 mm Hg in 1999-2002 to 51.9 mm Hg in 2011-2014 and then increased to 53.2 mm Hg in 2015-2018. Among adolescents aged 13 to 17 years, age-adjusted mean SBP decreased from 109.2 mm Hg in 1999-2002 to 108.4 mm Hg in 2011-2014 and then remained unchanged in 2015-2018, while mean DBP decreased from 62.6 mm Hg in 1999-2002 to 59.6 mm Hg in 2011-2014 and then increased to 60.8 mm Hg in 2015-2018. Compared with normal-weight children, mean SBP and mean DBP were higher in overweight and obese children aged 8 to 12 years. Among adolescents, SBP was higher among boys versus girls and among non-Hispanic Black versus White participants.

"Stable or increased BP levels and hypertension prevalence from 2011-2014 to 2015-2018 could indicate a reversal of these trends," the authors write.

One author disclosed financial ties to Amgen.

**More information:** [Abstract/Full Text](#)

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