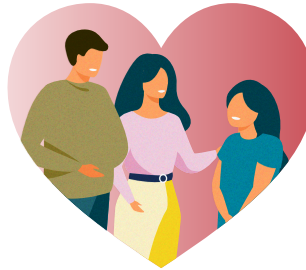


# Cardiovascular Disease Prevention and Risk Factor Management in Youth

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Cardiovascular disease (CVD) among youth in the United States is significantly influenced by the high prevalence of cardiovascular risk factors, such as prehypertension/hypertension, borderline-high/high LDL cholesterol, and prediabetes/diabetes.



## Hypertension Diagnostic Criteria for Children and Adolescents<sup>1</sup>

- Youth < 13 years of age: Three elevated blood pressure readings above the 95th percentile for age, height, and sex
- Youth > 13 years of age: Three elevated blood pressure readings > 130/80 mmHg

## Strategies for Prevention:<sup>1</sup>

- Engaging the whole family in making and sticking with healthy lifestyle changes.
- Involving children in their care decisions.
- Helping children and their families make plans for 60 minutes of daily activity.
- Recommending the DASH diet and making a referral to a pediatric dietitian.
- Promoting sleep hygiene by focusing on the quantity and quality of sleep.
- Screening for and addressing social determinants of health and providing tailored referrals and resources.

## Screening and Identification

Children and adolescents should be screened for CVD risk factors early and often:

- Measure blood pressure at well-child visits starting at age 3.<sup>1</sup>
- Consider universal screening of cholesterol at ages 9-11 and 17-21. Prioritize screening for youth with risk factors or family history.<sup>2</sup>
- For youth with family history and/or risk factors, screen for diabetes starting at age 10 or onset of puberty.<sup>3</sup>
- Hypertension and Other Cardiometabolic Risk Factors:
  1. Overweight or obesity: BMI  $\geq$  85th percentile for age and sex, or weight  $\geq$  120% of ideal body weight
  2. Family history of type 2 diabetes, CVD, or metabolic disease
  3. Signs of insulin resistance (e.g., acanthosis nigricans, hypertension, dyslipidemia, or polycystic ovary syndrome)
  4. Maternal history of diabetes or gestational diabetes during the child's gestation
  5. Certain ethnic groups with higher rates of diabetes (e.g., African American, Hispanic, Native American, Asian American, or Pacific Islander)
  6. History of prematurity, low birth weight, or congenital heart disease
  7. Sedentary lifestyle
  8. Chronic psychological stress or childhood trauma
  9. History of sleep disorders (e.g., obstructive sleep apnea)
  10. Smoking or exposure to secondhand smoke
  11. High sodium, nutrient-poor diet

If hypertension, diabetes, obesity, or hyperlipidemia is discovered, consider referral to a pediatric cardiologist, endocrinologist, or to additional specialty services.

For more information, access Cardi-OH's expanded resource on [preventing cardiovascular disease in youth](#).

### References

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3. American Diabetes Association Professional Practice Committee. 2. Diagnosis and classification of diabetes: Standards of Care in Diabetes-2024. *Diabetes Care*. 2024;47 (Suppl 1):S20-S42. doi:10.2337/dc24-S002.

The Ohio Cardiovascular and Diabetes Health Collaborative is funded by the Ohio Department of Medicaid and administered by the Ohio Colleges of Medicine Government Resource Center. The views expressed in this document are solely those of the authors and do not represent the views of the state of Ohio or federal Medicaid programs.

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