

Screening for Primary Hypertension in Children and Adolescents

The U.S. Preventive Services Task Force (Task Force) has issued a **final** recommendation statement on *Screening for Primary Hypertension in Children and Adolescents*.

This final recommendation statement applies to children and adolescents (teens) from birth to age 18 who do not have signs or symptoms of high blood pressure or of an underlying health problem that could cause high blood pressure.

The Task Force reviewed recent research studies on screening for high blood pressure in children and teens. The final recommendation statement summarizes what the Task Force learned about the potential benefits and harms of this screening: There is not enough evidence at this time to recommend for or against screening for high blood pressure in children or teens.

This fact sheet explains the recommendation and what it might mean for you.

What is hypertension?

Hypertension is the medical word for high blood pressure. Blood pressure is the force of blood pushing against the walls of the arteries as the heart pumps blood around the body. If this pressure rises and stays high for a long time, it can damage the body in many ways. When hypertension has no known cause, it is called primary hypertension. When an underlying condition, such as kidney disease, causes the hypertension, it is called secondary hypertension.

Facts About High Blood Pressure

High blood pressure is a serious condition that, in adults, can lead to heart attack, stroke, kidney and heart failure, and early death. It is a common condition among adults in the United States and it is becoming more common among children and teens.

Children and teens who have high blood pressure are more likely to have high blood pressure as adults. However, at this time, we don't have good ways of knowing exactly which children with high blood pressure will outgrow it, and which will continue to have it as they become adults.

Obesity is the strongest risk factor for high blood pressure in children and teens. Other risk factors include being male, and having parents with high blood pressure. Children in some groups such as African Americans and Hispanic Americans are more likely to develop high blood pressure than those in other racial or ethnic groups.

Screening for High Blood Pressure

For both adults and children, screening for high blood pressure is usually done with a blood pressure cuff wrapped around the upper arm. A healthcare professional inflates the cuff and listens to the heartbeat with a stethoscope placed against the inside of the elbow as the air is slowly let out of the cuff. The blood pressure is written as two numbers. The first number is the systolic pressure, or the blood pressure when the heart is pumping blood, and the second number is diastolic pressure, or the blood pressure when the heart is at rest between beats.

Potential Benefits and Harms

The Task Force reviewed studies that looked at the accuracy of screening tests for high blood pressure in children and teens. In addition, they examined the relationship between high blood pressure in childhood and high blood pressure in adulthood. They also looked at the benefits and harms of treating high blood pressure in children and teens.

Overall, the Task Force found very little evidence about the benefits of screening for high blood pressure in children and teens and much of the available evidence is unclear. There is limited information about the accuracy of the blood pressure cuff in diagnosing high blood pressure in children and teens. Information about the right age at which to start screening for high blood pressure or how often to screen is also limited.

The Task Force also found that it is difficult to use screening to predict which children and teens will have high blood pressure as adults. While programs designed to improve healthy habits and medications have both been used to lower blood pressure in children, no evidence is available on whether they are effective over the long term. It is also unclear whether treating children or teens for high blood pressure will improve their heart health when they are adults.

Finally, the Task Force also found very little evidence about potential harms of screening. A potential harm is that blood pressure tests may sometimes show a high blood pressure reading, when in fact, blood pressure is normal (a false-positive result). This may lead to unneeded follow-up tests or unnecessary treatment. Medications to treat high blood pressure also may have harmful side effects, and very little is known about their effects when used for a long time in children and adolescents.

Based on the small amount of evidence available on the benefits and harms of screening, the Task Force could not determine whether screening children and teens for high blood pressure is effective.

The Final Recommendation Statement on Screening for Primary High Blood Pressure in Children and Adolescents: What Does it Mean?

Here is the Task Force's final recommendation statement on screening for high blood pressure in children and teens. Recommendation statements have letter grades. The grades are based on the quality and strength of the evidence about the potential benefits and harms of screening for this purpose. They are also based on the size of the potential benefits and harms. Task Force recommendation grades are explained in the box at the end of this fact sheet.

When there is not enough solid evidence to judge benefits and harms, the Task Force does not make a recommendation for or against—it issues an I Statement. The Notes explain key ideas.

Visit the Task Force Web site to read the full [final recommendation statement](#). The statement explains the evidence the Task Force reviewed and how it decided on the grade. An [evidence report](#) provides more detail about the studies the Task Force reviewed.

1 The Task Force concludes that the current *evidence is insufficient to assess the balance of benefits and harms* of screening for *primary hypertension* in *asymptomatic children and adolescents* to prevent *subsequent cardiovascular disease* in childhood or adulthood. **I Statement**

Notes

1 *evidence is insufficient*
The Task Force found few studies, and the results were inconsistent and unclear.

assess the balance...

The Task Force was not able to determine whether any potential benefits would outweigh any potential harms.

primary hypertension

High blood pressure that has no known cause. This is the most common type of high blood pressure in teens and adults.

asymptomatic

Having no signs or symptoms of high blood pressure or of an underlying health problem that could cause high blood pressure.

children and adolescents

Children and teens from birth to age 18.

subsequent cardiovascular disease

Later heart disease or stroke.

What is the U.S. Preventive Services Task Force?

The Task Force is an independent, volunteer group of national experts in prevention and evidence-based medicine. The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, and preventive medicines. The recommendations apply to people with no signs or symptoms of the disease being discussed.

To develop a recommendation statement, Task Force members consider the best available science and research on a topic. For each topic, the Task Force posts draft documents for public comment, including a draft recommendation statement. All comments are reviewed and considered in developing the **final recommendation statement**. To learn more, visit the **Task Force Web site**.

USPSTF Recommendation Grades	
Grade	Definition
A	Recommended.
B	Recommended.
C	Recommendation depends on the patient's situation.
D	Not recommended.
I statement	There is not enough evidence to make a recommendation.

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Health Topics:
High Blood Pressure
(National Heart, Lung, and Blood Institute, National Institutes of Health)