Screening for High Blood Pressure in Adults

The U.S. Preventive Services Task Force (Task Force) has issued a final statement on Screening for High Blood Pressure in Adults.

This final statement applies to adults ages 18 and older who have not already been diagnosed with high blood pressure.

The Task Force reviewed recent research studies on screening for high blood pressure in adults. The final statement summarizes what the Task Force learned about the potential benefits and harms of this screening: Adults should be screened for high blood pressure. If a blood pressure measurement taken in a medical setting shows that a patient has high blood pressure, additional monitoring should be done outside of that setting to confirm a diagnosis of high blood pressure. This monitoring should be done except in cases when it is clear that treatment should begin right away.

Blood pressure is the force of blood pushing against the walls of the arteries as the heart pumps blood around the body. High blood pressure is a condition where blood pressure rises and stays high for an extended time. High blood pressure can damage the body in many ways. The medical word for high blood pressure is hypertension.

Facts about High Blood Pressure

It is normal for blood pressure to rise and fall throughout the day. However, when blood pressure rises and stays high for a long time, a person has a condition called high blood pressure. High blood pressure is a serious condition that raises a person's risk for heart attack, stroke, and kidney and heart failure. These are leading cause of death in the United States, particularly among older Americans. Often, high blood pressure has no signs or symptoms.

Blood pressure is measured with two numbers. The first number is the systolic pressure, or the blood pressure when the heart is pumping blood. The second number is diastolic pressure, or the blood pressure when the heart is at rest between beats.

People at increased risk of developing high blood pressure include those with blood pressures that are at the high end of the normal range, African Americans, and those who are obese or overweight. In addition, people are more likely to develop high blood pressure as they get older.

Screening for High Blood Pressure

Measuring high blood pressure is often done by a health care professional during an office visit. The doctor or nurse wraps a blood pressure cuff around the person's upper arm, 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.
Screening for High Blood Pressure in Adults

When blood pressure is measured, the numbers may be high for several reasons. The person may actually have the condition of high blood pressure. Or, blood pressure may be high for other reasons:

- Blood pressure can be affected by short-term factors like emotion, stress, pain, physical activity, or because of caffeine consumption or nicotine use.
- Some people may have high blood pressure only in a medical setting or in the presence of medical staff. This is called "white coat hypertension."
- A person could have high blood pressure numbers because of a measurement error or because blood pressure was not taken enough times.

Because high blood pressure numbers do not always mean that a person has the condition of high blood pressure, the Task Force recommends that health care professionals also measure blood pressure outside of the office setting to confirm whether the person actually has high blood pressure. This can be done in two ways:

- **Ambulatory blood pressure monitoring (ABPM).** The Task Force found that ABPM is the best way to confirm a diagnosis of high blood pressure outside of a medical setting. ABPM involves wearing a cuff attached to a small, portable machine that records blood pressure every half hour over a period of 12 to 48 hours. It takes many blood pressure measurements while a person is going through daily activities and during sleep. ABPM more accurately predict the risk of stroke, heart attacks, and other conditions than blood pressure screening in a medical setting.

- **Home Blood Pressure Monitoring (HBPM).** HBPM is another way to confirm high blood pressure outside of a medical setting. In this monitoring, a person uses an inflatable cuff, strap, or other device to take his or her own blood pressure outside of a medical setting.

In some cases, blood pressure monitoring outside the doctor’s office is not necessary because the person needs to begin blood pressure treatment immediately. This includes people:

- Whose blood pressure is very high.
- Who show signs that they have organ damage related to their blood vessels.
- Who have been diagnosed with high blood pressure caused by an underlying condition, such as kidney disease.

**Potential Benefits and Harms of High Blood Pressure Screening**

The goal of screening is to detect high blood pressure so that treatment can begin, if it is needed. The Task Force found that screening for and treating high blood pressure has significant benefits. Screening and treatment can help prevent important health conditions like heart attacks and strokes.

The Task Force also found that blood pressure screening has few harms.

After an initial screening, people ages 40 and older and those who are at increased risk for high blood pressure should be screened again every year. People ages 18 to 39 years with normal blood pressure and who do not have other risk factors should be screened again every 3 to 5 years.
Screening for High Blood Pressure in Adults

The Final Recommendation on Screening for High Blood Pressure in Adults: What Does it Mean?

Here is the Task Force’s final recommendation on screening for high blood pressure in adults. Recommendations 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 the Task Force recommends screening (Grade A), it is because it has more potential benefits than potential harms. 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 document provides more detail about the studies the Task Force reviewed.

1. The Task Force recommends screening for high blood pressure in adults ages 18 years and older. The Task Force recommends obtaining measurements outside of the clinical setting for diagnostic confirmation before starting treatment. Grade A

Notes

1. **screening**
   Measuring a person’s blood pressure in a doctor’s office or clinic.

   **obtaining measurements outside of the clinical setting**
   If blood pressure numbers are high, additional monitoring with ABPM or HBPM should be done outside of the doctor’s office or clinic to confirm a diagnosis of high blood pressure.
Talking to Your Doctor about High Blood Pressure Screening

Having high blood pressure raises your risk for a heart attacks, strokes, and kidney or heart failure. These are leading causes of death in the United States, especially for older people. If your doctor or nurse measures your blood pressure in the office and your numbers are high, talk with him or her about next steps to determine whether, in fact, you have high blood pressure. Make sure your concerns and questions are answered. Consider your health and your personal beliefs and preferences for health care. And consider scientific recommendations, like this one from the Task Force.

Also, talk with your doctor or nurse about other actions you can take to keep your blood pressure and your heart as healthy as possible. These actions include eating a healthy diet, being physically active, and not smoking.

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.

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.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Recommended.</td>
</tr>
<tr>
<td>B</td>
<td>Recommended.</td>
</tr>
<tr>
<td>C</td>
<td>Recommendation depends on the patient’s situation.</td>
</tr>
<tr>
<td>D</td>
<td>Not recommended.</td>
</tr>
<tr>
<td>I statement</td>
<td>There is not enough evidence to make a recommendation.</td>
</tr>
</tbody>
</table>