

## High Blood Pressure in the Emergency Department

High blood pressure, or **hypertension**, happens when the force of your blood pushing against the walls of your blood vessels is consistently too high. This makes your heart work harder to pump blood throughout your body.



## Asymptomatic Hypertension: High Blood Pressure Without Symptoms

**Asymptomatic Hypertension** means your blood pressure is elevated, but you don't feel any symptoms. You might not have headaches, dizziness, chest pain, or shortness of breath. It's common for blood pressure readings to be higher than usual during times of stress or anxiety, such as when visiting the emergency department (ED).

**Asymptomatic Hypertension is not a medical emergency.** There is no role to investigate or treat asymptomatic hypertension in the emergency department. In fact, initiating treatment too soon has been shown to be more harmful than helpful.

### 1. Elevated Blood Pressure is a Long-Term Concern

**Gradual Effects:** High blood pressure causes damage over **long periods**. It can lead to health problems like heart disease, stroke, or kidney issues if it stays uncontrolled for many years.

**No Immediate Danger:** In the absence of symptoms, elevated blood pressure doesn't pose an urgent threat that requires emergency treatment.

### 2. Studies Show Very Low Immediate Risk

**Low Risk of Serious Events:** Research has shown that people with asymptomatic hypertension have a very low chance of experiencing serious heart problems in the near future.

**30-Day and 365-Day Outlook:** A study found that the risk of major heart events within 30 days was extremely low. <sup>[1]</sup> A more recent study showed that even after one year, the risk remained exceedingly low. <sup>[2]</sup>

**Reassurance:** This means you're unlikely to have a heart attack or stroke in the immediate future because of your current blood pressure reading.

### 3. Risks Develop Over Time, Not Overnight

**Slow Progression:** The harmful effects of hypertension accumulate slowly over months/years.

**Emergency Treatment Unnecessary:** Immediate intervention in the ED won't prevent these long-term risks because they don't happen suddenly.

### 4. Rapid Treatment is Potentially Harmful

**Avoiding Sudden Changes:** Quickly lowering your blood pressure when you have no symptoms can cause side effects like dizziness or fainting.

**No Proven Benefit in the Emergency Department:** Studies show that immediate treatment in the ED doesn't improve long-term outcomes for people with asymptomatic hypertension.

## 5. Focus on Long-Term Management

**Chronic Management is Key:** Consistently controlling your blood pressure over time is the most effective way to reduce the risk of future health problems

**Better Outcomes:** Regular check-ups and lifestyle changes have been proven to manage hypertension successfully.

### Understand Why Long-Term Management Matters

**Slow and Steady Impact:** Elevated blood pressure gradually affects your body over time.

**Blood Vessel Damage:** Constant high pressure can damage the inner lining of your arteries, leading to stiffness and narrowing.

**Heart Strain:** Your heart has to work harder to pump blood against the higher pressure, which can weaken it over years

**Organ Effects:** Over long periods, uncontrolled hypertension can damage kidneys, eyes, and brain

**No Immediate Symptoms:** Because this damage happens slowly, you might not feel any different while it's occurring.

**Importance of Ongoing Control:** Managing your blood pressure consistently helps prevent these long-term complications.

### Acute Management

- **When It's Needed:** Immediate treatment is necessary if high blood pressure is causing serious symptoms or emergencies, like chest pain, severe headache, vision changes, or signs of a stroke.
- **Goal:** Quickly lower blood pressure to prevent immediate harm.

### Chronic Management

- **When It's Needed:** For asymptomatic hypertension, where there are no urgent symptoms.
- **Goal:** Gradually reduce blood pressure to healthy levels over time to prevent long-term damage.
- **Approach:** Lifestyle changes, regular monitoring, and possibly medications prescribed by your primary care doctor.

## How You Can Take Control

### 1. Schedule a Follow-Up Appointment

- **Primary Care is Essential:** Your doctor can develop a personalized plan to manage your blood pressure effectively.
- **Regular Monitoring:** Ongoing check-ups help track your progress and adjust as needed.

### 2. Adopt a Healthy Lifestyle

- **Eat a Balanced Diet:** Focus on fruits, vegetables, whole grains, and lean proteins. Reduce salt intake, as too much salt can raise blood pressure.
- **Stay Active:** Aim for at least 30 minutes of moderate exercise most days of the week.
- **Avoid Smoking and Limit Alcohol:** Both can contribute to higher blood pressure.

### 3. Manage Stress

- **Relaxation Techniques:** Activities like deep breathing, meditation, or yoga can help lower stress levels.
- **Adequate Sleep:** Getting enough restful sleep is important for overall health.

### 4. Follow Medical Advice

- **Medication Adherence:** If your doctor prescribes medication, take it as directed.
- **Communicate:** Let your doctor know about any side effects or concerns.

## Key Takeaways

**Long-Term Condition:** High blood pressure is a chronic issue that requires consistent management over time. A high blood pressure at one point in time is not as concerning as persistently elevated blood pressure over a long term.

**Very Low Immediate Risk:** Studies have shown that the risk of serious heart problems in the short term is extremely low for people seen in the emergency department with asymptomatic hypertension.

**Your Role is Crucial:** Making lifestyle changes and following up with your doctor are the best ways to control your blood pressure.

**We're Here to Support You:** While immediate treatment in the ED isn't necessary, we're committed to helping you manage your health.

**Remember:** Managing high blood pressure is a marathon, not a sprint. By taking steps to control it over time, you reduce the risk of future health problems.

## **Questions and Answers**

**Q:** *Isn't high blood pressure dangerous?*

**A:** Yes, but the danger lies in long-term uncontrolled high blood pressure. It increases the risk of serious health problems over years, not hours. Studies show that the immediate risk is very low.

**Q:** *Shouldn't we do tests to make sure everything is okay?*

**A:** In the absence of symptoms, immediate tests are unlikely to find urgent problems. Regular check-ups with your doctor are the best way to monitor your health.

**Q:** *What if I start feeling symptoms later?*

**A:** If you experience symptoms like severe headache, chest pain, or difficulty breathing, seek medical attention right away.

## **References**

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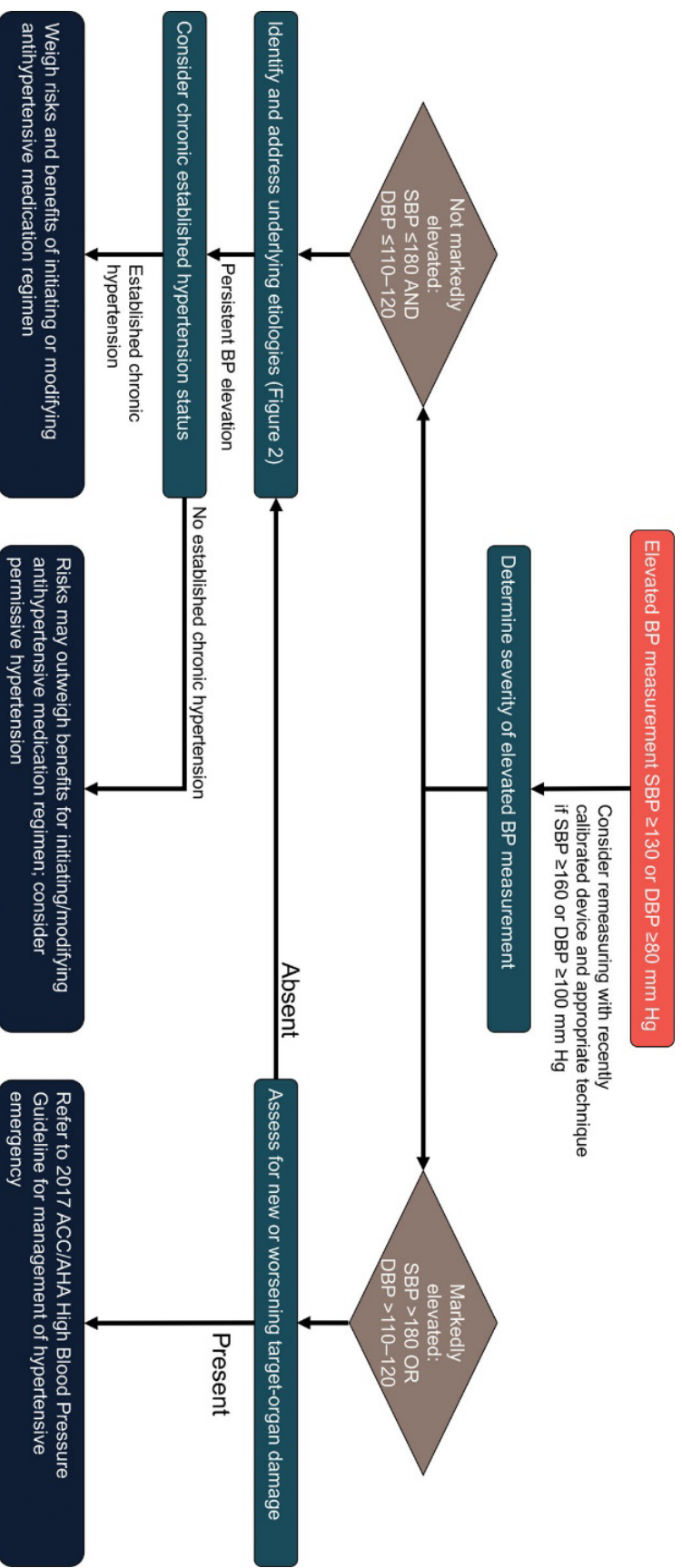
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**Figure from May 2024 Scientific Statement from the American Heart Association on the The Management of Elevated Blood Pressure in the Acute Care Setting [3]**

