

COMPREHENSIVE GUIDE TO HYPERTENSION

Description

Hypertension, commonly known as high blood pressure, is a condition where the force of the blood against your artery walls is high enough that it may eventually cause health problems, such as heart disease and stroke.

Blood pressure (BP) is recorded with two numbers. The **systolic** (top) number measures the pressure in your arteries when your heart beats, and the **diastolic** (bottom) number measures the pressure when your heart rests between beats.

Normal: Systolic is lower than 120 and Diastolic lower than 80.

Elevated: Systolic is between 120 and 129 and Diastolic is normal.

Stage 1 Hypertension: Systolic is between 130 and 140 or Diastolic is between 80 and 90.

Stage 2 Hypertension: Systolic higher than 140 or 90 or Diastolic is higher than 90

History

The study of blood pressure has evolved from ancient pulse-reading to modern digital monitoring:

Ancient Insights (c. 2600 BC): The Yellow Emperor's Classic of Internal Medicine in China noted that "if too much salt is used in food, the pulse hardens," linking diet to cardiovascular health thousands of years ago.

The First Measurement (1733): English clergyman Stephen Hales made the first published measurement of blood pressure by inserting a tube into the artery of a horse.

Invention of the Sphygmomanometer (1896): Italian physician Scipione Riva-Rocci invented the cuff-based mercury blood pressure monitor, which is the ancestor of the tools used in clinics today.

The "Silent Killer" Era (Mid-20th Century): Before the 1940s, high blood pressure was sometimes thought to be a necessary part of aging. The death of U.S. President Franklin D. Roosevelt from a massive stroke (with readings as high as 300/190) spurred massive research into effective treatments.

How the Disease Spreads

Hypertension is **not a contagious disease**. You cannot "catch" high blood pressure from another person like a cold or the flu. Instead, it spreads through populations due to:

- Shared Environment: Families or partners often share the same diet (high salt/low potassium) and activity levels.
- Genetics: It is hereditary; if your parents have high blood pressure, you are at a significantly higher risk.
- Aging Populations: As societies age and become more sedentary, the prevalence of hypertension increases.

Common Symptoms

Hypertension is often called the "**Silent Killer**" because most people have **no symptoms**, even if blood pressure readings reach dangerously high levels. When symptoms do occur, they may include:

- Severe headaches
- Shortness of breath
- Nosebleeds
- Flushing or feeling "hot" in the face
- Dizziness or blurred vision
- Chest pain (in severe cases)

When to Visit a Doctor

Since symptoms are rare, you should not wait for them to appear before seeking medical advice.

- Routine Screening: Have your blood pressure checked at least once every two years starting at age 18, and annually if you are over 40 or have risk factors.
- Persistent High Readings: If you take your blood pressure at home and it is consistently 130/80 or higher.
- Hypertensive Crisis: Seek emergency care immediately if your blood pressure is 180/120 or higher AND you experience chest pain, severe headache, confusion, or numbness/weakness.

Preventative Measures

Most cases of Type 2 (Essential) hypertension are preventable through lifestyle choices:

- **The DASH Diet:** Follow the *Dietary Approaches to Stop Hypertension* - rich in fruits, vegetables, and low-fat dairy while minimizing red meat and sweets.

- **Sodium Reduction:** Aim for less than **2,300 mg** of salt per day (ideally **1,500 mg** for those already at risk).
- **Potassium Intake:** Eat potassium-rich foods like bananas, spinach, and sweet potatoes to help "flush" salt out of your system.
- **Move More:** Aim for 30 minutes of aerobic activity (like brisk walking) most days of the week.
- **Limit Alcohol:** Excessive drinking can raise blood pressure and reduce the effectiveness of medications.