

# The Silent Threat: Understanding Hypertension

## Introduction

Hypertension, commonly known as high blood pressure, is a pervasive and often silent condition affecting millions globally. Despite its prevalence, many individuals remain unaware of its presence until it manifests through more severe health complications. This article delves into the nature of hypertension, its causes, consequences and strategies for management and prevention.

## Description

### What is hypertension

Hypertension is a chronic medical condition where the blood pressure in the arteries is persistently elevated. Blood pressure is the force exerted by circulating blood on the walls of blood vessels. It is measured in Millimeters of Mercury (mmHg) and recorded as two numbers: Systolic pressure (the pressure during the heart's contraction) over diastolic pressure (the pressure during the heart's relaxation between beats). A normal blood pressure reading is generally considered to be around 120/80 mmHg.

Hypertension is classified into two main types

**Primary (essential) hypertension:** This form of hypertension has no identifiable cause and accounts for about 90%-95% of cases. It tends to develop gradually over many years.

**Secondary hypertension:** This type is caused by an underlying condition, such as kidney disease, hormonal disorders or the use of certain medications. It tends to appear suddenly and cause higher blood pressure than primary hypertension.

### Causes and risk factors

The exact cause of primary hypertension is often elusive, but several factors are known to increase the risk of developing the condition. These include.

**Genetics:** Hypertension tends to run in families, indicating a hereditary component.

**Age:** The risk of hypertension increases with age.

**Gender:** Until about age 64, men are more likely to develop high blood pressure than women. After 65, women are more likely to develop it.

**Race:** Hypertension is particularly common among people of African descent, often developing at an earlier age than in other demographics.

**Lifestyle factors:** Unhealthy diets (particularly those high in salt), lack of physical activity, excessive alcohol consumption and tobacco use are significant risk factors.

**Obesity:** Excess weight increases the workload on the heart, raising blood pressure.

**Stress:** Chronic stress can contribute to hypertension by causing consistent spikes in blood pressure.

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Secondary hypertension can be triggered by various conditions and factors, including kidney disease, adrenal gland tumors, thyroid problems, certain congenital defects in blood vessels and certain medications, such as birth control pills and decongestants.

#### Consequences of uncontrolled hypertension

Hypertension is often dubbed the “silent killer” because it can exist without symptoms for years while causing significant damage to the cardiovascular system and other organs. If left uncontrolled, hypertension can lead to severe health issues, including,

**Heart disease:** Hypertension increases the risk of heart attack, heart failure and sudden cardiac death.

**Stroke:** High blood pressure can cause blood vessels in the brain to burst or become blocked, leading to a stroke.

**Kidney damage:** The kidneys are highly sensitive to changes in blood pressure and prolonged hypertension can lead to chronic kidney disease or kidney failure.

**Vision loss:** High blood pressure can damage the blood vessels in the retina, leading to vision impairment or loss.

**Aneurysm:** Increased pressure can cause the blood vessels to weaken and bulge, forming an aneurysm which can be life-threatening if it bursts.

#### Diagnosis and monitoring

Diagnosing hypertension involves measuring blood pressure using a sphygmomanometer. For an accurate diagnosis, multiple readings over a period are often necessary. Blood pressure measurements are categorized as follows.

**Normal:** Less than 120/80 mmHg.

**Elevated:** Systolic between 120 mmHg-129 mmHg and diastolic less than 80 mmHg.

**Hypertension Stage 1:** Systolic between 130 mmHg-139 mmHg or diastolic between 80 mmHg-89 mmHg.

**Hypertension Stage 2:** Systolic at least 140 mmHg or diastolic at least 90 mmHg.

**Hypertensive Crisis:** Systolic over 180 mmHg and/or diastolic over 120 mmHg, requiring immediate medical attention.

#### Management and treatment

Managing hypertension typically involves a combination of lifestyle changes and medication. The goal is to lower blood pressure to a safe level and prevent complications. Key strategies include.

#### Prevention

Preventing hypertension involves many of the same strategies used for managing the condition. These include maintaining a healthy diet, engaging in regular physical activity, avoiding excessive alcohol consumption, not smoking, managing stress and keeping a healthy weight. Regular check-ups with a healthcare provider can help detect and address any changes in blood pressure early.

#### Conclusion

Hypertension is a silent yet formidable health risk that requires vigilant attention and proactive management. Understanding the risk factors, consequences and strategies for prevention and treatment is essential in combating this widespread condition. By adopting a healthy lifestyle and working closely with healthcare providers, individuals can significantly reduce their risk of developing hypertension and its associated complications, leading to a longer and healthier life.