

HYPERTENSION

Hypertension or high blood pressure is when the force of your blood pushing against the walls of your arteries is high. The top or highest number is the pressure when your heart beats called systolic. The bottom number when your heart is relaxed. Normal blood pressure is 120/80 or lower. Treatment is often recommended when it is 130/80 or higher. It can be very dangerous when blood pressure is higher than 180/120. High blood pressure can cause damage to blood vessels all over your body. High blood pressure increases the risk of heart failure, heart attack/coronary artery disease, stroke, kidney disease, and vision loss.

Type of hypertension and causes

Essential hypertension – This is the most common type of high blood pressure when there is no clear cause found.

Secondary hypertension – This type of high blood pressure is due to another condition such as

- Chronic kidney disease
- Hormonal problems (i.e. pheochromocytoma, Cushing's syndrome)
- Medication induced (i.e. birth control pills, pain relievers, some cold medicines)
- Illegal drugs (i.e. cocaine, amphetamines)
- Obstructive sleep apnea
- Thyroid problems

Risk factors

- Age – The risk of having high blood pressure increases with age
- Race – High blood pressure is more common in African Americans
- Family history
- Obesity or being overweight
- Lack of exercise
- Tobacco use
- Eating too much salt
- Drinking too much alcohol
- High stress levels
- Pregnancy

Symptoms

High blood pressure is known as the silent killer as it often does not cause any symptoms. Some people with high blood pressure may have headaches, shortness of breath, or nosebleeds. When blood pressure is dangerously high, it can cause symptoms of a heart attack such as chest pain or even a stroke such as weakness on 1 side of body or vision loss.

Diagnosis

It is routine for your blood pressure to be checked when you see your doctor. It is recommended that you do not smoke, exercise, or use caffeine for 30-60 minutes prior to having your blood pressure checked. You should be seated, relaxed for 5 minutes with your back supported, remain calm and quiet while blood pressure is checked.

Blood Pressure Category	Systolic Blood Pressure		Diastolic Blood Pressure
Normal	Less than 120	and	Less than 80
Elevated	120 - 129	and	Less than 80
High Blood Pressure Stage 1	130 - 139	or	80 - 89
High Blood Pressure Stage 2	140 or higher	or	90 or higher
Hypertensive Crisis (dangerously high blood pressure - seek medical care right away)	Higher than 180	and	Higher than 120

Taken from <https://medlineplus.gov/highbloodpressure.html#summary>

Treatment

Involves a combination of heart healthy lifestyle changes and medications. Often, in the setting of high blood pressure stage 2, more than 1 medication is needed to help control blood pressure.

Common medications include:

- **Angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor blockers (ARBs)** (i.e. lisinopril, benazepril, losartan, olmesartan) relax blood vessels to allow blood to flow through them with less pressure. In the setting of heart disease and diabetes, these medications have beneficial effects on the heart and kidneys.
- **Calcium channel blockers** (i.e. amlodipine, nifedipine) prevent calcium from entering the muscle cells of your heart and blood vessels. This allows the blood vessels to relax.
- **Diuretics** (i.e. hydrochlorothiazide, chlorthalidone) remove extra water and salt from your body to decrease the amount of fluid in your blood. Often diuretics are combined in 1 pill with other medicines for better blood pressure control.
- **Beta blockers** (i.e. labetalol, carvedilol, nebivolol) decrease rate of heartbeat and the force that the heart uses to pump blood.

Managing hypertension effectively involves several key strategies:

1. **Regular Check-ups:** Consistently seeing your healthcare provider to monitor your blood pressure and adjust treatment plans as needed. Your provider may ask you to check your blood pressure at home. It is ideal to use a well-fitted arm cuff and not a wrist cuff to avoid inaccurate readings.
2. **Healthy Diet:** Following a balanced diet like the DASH (Dietary Approaches to Stop Hypertension) eating plan, which emphasizes fruits, vegetables, whole grains, and lean proteins.
3. **Physical Activity:** Engaging in regular physical activity as recommended by your doctor, which can help lower blood pressure and improve overall heart health. The current standard recommendation is 150 minutes of physical activity outside of your normal daily routine.

4. Medication Adherence: Taking prescribed medications exactly as directed by your healthcare provider to help control blood pressure levels.

Controlling blood pressure is crucial to preventing complications such as heart disease, stroke, and kidney damage.

Support Groups

American Heart Association [Home](https://supportnetwork.heart.org/s/) <https://supportnetwork.heart.org/s/>

For additional information, check out:

[High Blood Pressure | Hypertension | MedlinePlus](https://medlineplus.gov/highbloodpressure.html) <https://medlineplus.gov/highbloodpressure.html>

[What is High Blood Pressure? | American Heart Association](https://www.heart.org/en/health-topics/high-blood-pressure/the-facts-about-high-blood-pressure) <https://www.heart.org/en/health-topics/high-blood-pressure/the-facts-about-high-blood-pressure>

Heart-healthy diet such as DASH eating plan [DASH Eating Plan | NHLBI, NIH](https://www.nhlbi.nih.gov/education/dash-eating-plan)
<https://www.nhlbi.nih.gov/education/dash-eating-plan>