

What is blood pressure?

Blood pressure (BP) is a measure of pressure or force of blood against the walls of your blood vessels called arteries. Think of it like water in a garden hose. As water travels through the hose, it creates pressure against the inside of the hose (arteries).

BP is measured by putting a cuff around your upper arm and inflating it. As the cuff is deflated, a measurement is taken of the force of blood flow through the artery in your arm.

The pressure of blood in your blood vessels is not always the same. It rises and falls with each beat, which is why BP is made up of 2 numbers. The first, or higher number, is the pressure when the heart contracts, pushing blood out, called **systolic BP**. The second, or lower number, represents the lowest pressure, when the heart relaxes between beats, called **diastolic BP**.

Sample blood pressure reading:

120

Systolic

The top number measures when your heart beats and pumps blood

80

Diastolic

The bottom number measures when your heart relaxes and fills with blood

BP can be measured with a manual device, or an automated (electronic) device, and is always measured in millimeters of mercury (mmHg).

Often there are no symptoms if your BP is 'high'. You may not feel it. But, if left untreated, it can cause very serious health problems, including heart disease and stroke. That is why high BP (hypertension) is often called the "silent killer."

What is your blood pressure?

My current BP _____

Goal (my target BP) _____

What is high blood pressure?

High blood pressure, called hypertension, happens when the pressure of the blood against the walls of your blood vessels is consistently high. In adults, hypertension is usually defined as equal or greater than 140/90 mmHg. However, if you have other risk factors for heart disease and stroke or other conditions such as kidney disease, your health care provider may decide to treat your blood pressure even if it is lower than 140/90 mmHg

Blood Pressure Ranges	
Category	Systolic/Diastolic (mmHg)
Optimal	120/80 or below
Normal	120 -129/80 - 84
High-Normal	130 -139/80 - 89
High BP (Hypertension)	140/90 or higher
High BP in people with diabetes	130/80 or higher
High BP with self/home monitoring	135/85 or higher

What happens if I am diagnosed with hypertension?

If you have been diagnosed with hypertension, you will need to work with your healthcare providers to get your blood pressure under control.

There is no cure for hypertension, but there are 2 ways to control blood pressure: **medication** and **lifestyle changes**.

The benefits of controlling your blood pressure include lowering your risk of developing heart disease, stroke and kidney disease.

Lowering your blood pressure can reduce your risk of:

- ↓ Stroke by 35-40%
- ↓ Heart attack by 20-25%
- ↓ Heart failure by 50%

Causes & Risk Factors for Hypertension:

Hypertension is common in adults in their 40s, 50s and older, but it can happen to anyone at any time. There are risk factors that increase the risk of hypertension and complications, some of these you can control, and others you cannot.

Looking at the lists below, ask yourself which apply to you:

Risk Factors you CANNOT control:

- I am 55 years or older
- I am male
- I am from one of these groups: African descent, South Asian, First Nations, Inuit or Metis
- I have a family history of hypertension
- I have a family history of heart disease, stroke or kidney disease

Risk Factors you CAN control:

- I eat a lot of salt and/or salty foods
- I am not physically active
- I drink more than 1-2 drinks containing alcohol per day
- I am overweight or have a large waist measurement
- I don't eat a lot of vegetables and fruit
- I eat a lot of foods that are high in saturated and trans fat
- I am stressed
- I smoke
- I have high blood cholesterol
- I have diabetes

Preventing & Controlling High Blood Pressure:

There are things you can do to prevent hypertension, or help control BP if you have been diagnosed with hypertension

- ✓ Monitor your blood pressure regularly – adults in good health should have their blood pressure checked every year. Adults with high blood pressure should have it checked more frequently, your health care provider will tell you how often, and if you should be checking it on your own between clinic visits, such as with a home monitor or at the local drug store.
- ✓ Take all your medications as directed by your healthcare provider
- ✓ Manage the lifestyle risk factors you CAN control

Look at the list of lifestyle Risk Factors you identified that you CAN control and discuss with your healthcare provider the kinds of changes you can make.

Making small changes to your lifestyle can have a BIG impact on lowering your BP.

- I CAN reduce my sodium intake
(↓ 4.1-5.4/2.8 mmHg)
- I CAN be more physically active daily
(↓ 7.4/5.8 mmHg)
- I CAN reduce my alcohol intake
(↓ 3.9/2.4 mmHg)
- I CAN achieve a healthy body weight
(↓ 1.6/1.1 mmHg for each kg of weight lost)
- I CAN stop smoking
- I CAN follow the DASH diet eating plan
(↓ 11.4/5.5 mmHg)
- I CAN better manage my stress
(↓ 9.7-15.2/7.2-9.2 mmHg)



Other resources that can help:

Heart & Stroke Foundation – call 1-888-473-4636 for tips and advice for managing blood pressure, or visit www.HeartAndStroke.ca