

# Blood Pressure

[getthehealthy.ca/high-blood-pressure](http://getthehealthy.ca/high-blood-pressure)

## In this section you will learn:

- What blood pressure is and how to properly measure it
  - The complications of high blood pressure
  - How to manage your blood pressure
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- Blood pressure is a measure of the force of blood pushing against the blood vessel walls
  - Blood pressure is comprised of two numbers:
    - Systolic (top number) is a measure of the pressure in the vessels when the heart contracts, pumping blood through the arteries.
    - Diastolic (bottom number) is a measure of the pressure in the vessels when the heart relaxes, between beats.
  - For those living with cardiovascular disease, the recommended resting blood pressure value is less than 140/90 mmHg. For those living with diabetes or chronic kidney disease, the recommended resting blood pressure value is less than 130/80 mmHg.
  - Factors that contribute to high blood pressure include physical inactivity, unhealthy dietary habits, excessive alcohol intake, smoking, unmanaged stress, unmanaged sleep apnea, non-compliance with medications, increased age, and family history.
  - High blood pressure is also referred to as hypertension.

## Complications of High Blood Pressure



Can damage the blood vessels that supply the heart, impacting the heart's blood supply and ability to pump efficiently

- Coronary artery disease
- Angina
- Arrhythmias
- Heart attack
- Heart failure



Can damage the blood vessels that supply and nourish the brain

- Stroke
- Transient ischemic attack (TIA)
- Cognitive impairment



Can damage the blood vessels that supply the eyes

- Retinopathy
- Vision loss



Can damage the blood vessels that supply the kidneys, which act as filters to remove waste products from the blood

- Kidney failure
- Kidney disease



Can damage the blood vessels that supply the limbs

- Peripheral artery disease



Can limit blood flow to reproductive structures

- Erectile dysfunction
- Reduced libido

## Managing Blood Pressure

**Regular physical activity and exercise:** Each week, aim to complete 150 to 300 minutes of cardio-based exercise, and at least two days of resistance training.

**Reduce sodium intake:** When you consume excess sodium, your body pulls water into your blood vessels in effort to dilute it. This increases the total volume inside the blood vessels, which increases the pressure on the blood vessel walls. Most of the sodium in your diet comes from processed foods and restaurant or take-out meals; cook your own meals as often as possible. Learn to read the sodium content on food labels, choosing foods with five per cent or less daily value for sodium.

**Manage stress levels:** Stress management solutions are unique to each individual; finding what works best for you is important. Suggestions include engaging in physical activity and exercise, improving sleep hygiene, or completing meditation or relaxation exercises.

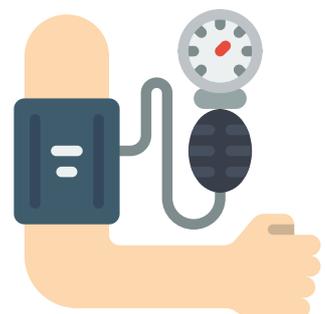
**Limit alcohol intake and smoke exposure:** Ensure you stay within the recommended guidelines if drinking alcohol. Smoking tobacco harms almost every organ in the body and can contribute to high blood pressure. Develop a plan to quit, seeking advice as necessary. Additionally, both alcohol and tobacco may impact the effectiveness of some blood pressure medications.

**Medications:** There are many types of medication that can be prescribed to aid in the management of high blood pressure. Take your medications as prescribed.

There are no symptoms of high blood pressure, so it is important to monitor your blood pressure regularly.

## How to Measure Your Blood Pressure

- Do not smoke or drink caffeine 30 minutes prior to checking
- Rest quietly for five minutes before checking
- Sit in a comfortable position, with your arm at heart level
- Feet should be flat on the floor; do not cross your legs or have your feet unsupported
- Take your blood pressure two to three times, and use the average of these values as your measurement



Notes: